

On approval of the nomenclature of specialties and specializations in the field of healthcare, nomenclature and qualification characteristics of positions of healthcare employees

#### Unofficial translation

Order of the Minister of Healthcare of the Republic of Kazakhstan dated December 21, 2020 № RK HM-305/2020. Registered with the Ministry of Justice of the Republic of Kazakhstan on December 22, 2020 № 21856.

#### Unofficial translation

Footnote. The title is in the wording of the Order № 66 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated 16 July 2025 (shall enter into force upon expiry of ten calendar days after its first official publication).

In order to implement subparagraph 42) of Article 7 of the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System," **I HEREBY ORDER**:

Footnote. The preamble is in the wording of the order of the Minister of Healthcare of the Republic of Kazakhstan dated 14.04.2023 № 72 (shall be enforced upon expiry of sixty calendar days after the day of its first official publication).

# 1. To approve:

- 1) the nomenclature of specialties and specializations in the field of healthcare in accordance with Appendix 1 to this order;
- 2) the nomenclature of positions of employees of the healthcare system in accordance with Appendix 2 to this order;
- 3) qualification characteristics of positions of employees of the healthcare system in accordance with Appendix 3 to this order.

Footnote. Paragraph 1 is in the wording of the Order № 66 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated 16 July 2025 (shall enter into force upon expiry of ten calendar days after the date of its first official publication).

- 2. To recognize as invalid certain Orders of the Ministry of Healthcare of the Republic of Kazakhstan in accordance with Annex 4 to this Order.
- 3. The Department of Science and Human Resources of the Ministry of Health of the Republic of Kazakhstan, in accordance with the procedure established by the legislation of the Republic of Kazakhstan, shall:
- 1) ensure state registration of this Order with the Ministry of Justice of the Republic of Kazakhstan;
- 2) place this Order on the Internet resource of the Ministry of Healthcare of the Republic of Kazakhstan;

- 3) within ten working days after the state registration of this Order with the Ministry of Justice of the Republic of Kazakhstan, submit to the Legal Department of the Ministry of Healthcare of the Republic of Kazakhstan information on the implementation of the measures provided for in subparagraphs 1) and 2) of this paragraph.
- 4. Control over the execution of this order shall be entrusted to the supervising Vice-Minister of Healthcare of the Republic of Kazakhstan.
- 5. This order shall enter into force upon the expiry of twenty-one calendar days after the date of its first official publication.

Minister of Healthcare of the Republic of Kazakhstan

A. Tsoi

Annex 1
to the Order of the Minister
of Healthcare of the
Republic of Kazakhstan
dated 02.12.2020
No RK HM-305/2020

#### Nomenclature of positions for healthcare system workers

Footnote. The title is in the wording of the Order № 66 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated 16 July 2025 (shall enter into force upon expiry of ten calendar days after its first official publication).

Footnote. Nomenclature is in the wording of the order of the Minister of Healthcare of the Republic of Kazakhstan dated 14.04.2023 № 72 (shall be enforced upon expiry of sixty calendar days after the day of its first official publication).

# Chapter 1. Specialties of employees with higher and postgraduate medical education

- 1. Obstetrics and gynecology (adults, children).
- 2. Allergology and immunology (adults, children).
- 3. Angiosurgery (adults, children).
- 4. Anesthesiology and intensive care (adult, children's).
- 5. Pediatric dentistry.
- 6. Oncology and hematology (children).
- 7. Pediatric surgery.
- 8. Gastroenterology (adults, children).
- 9. Hematology (adults).
- 10. Dermatovenerology (adults, children).
- 11. Oncology (adult).
- 12. Maxillofacial surgery (adults, children).
- 13. General medical practice.
- 14. General surgery.

- 15. Infectious diseases (adults, children).
- 16. Cardiology (adults, children).
- 17. Cardiac surgery (adults, children).
- 18. Emergency medicine (adults, children).
- 19. Kinesiotherapy.
- 20. Clinical laboratory diagnostics.
- 21. Clinical pharmacology.
- 22. Medical genetics.
- 23. Nursing.
- 24. Neurology (adults, children).
- 25. Neurosurgery (adults, children).
- 26. Neonatology.
- 27. Nephrology (adults, children).
- 28. Orthodontics.
- 29. Orthopedic dentistry.
- 30. Family medicine.
- 31. Otorhinolaryngology (adults, children).
- 32. Ophthalmology (adults, children).
- 33. Pathological anatomy.
- 34. Pediatrics.
- 35. Plastic surgery (adults, children).
- 36. Psychiatry (adults, children).
- 37. Pulmonology (adults, children).
- 38. Radiation oncology.
- 39. Radiology.
- 40. Rheumatology (adults, children).
- 41. Forensic medical examination.
- 42. Dentistry.
- 43. Therapy.
- 44. Therapeutic dentistry.
- 45. Emergency and disaster medicine.
- 46. Traumatology-orthopedics (adults, children).
- 47. Urology and andrology (adults, children).
- 48. Physical medicine and rehabilitation (adults, children).
- 49. Phthisiology (adults, children).
- 50. Chemotherapy oncology.
- 51. Surgical dentistry.
- 52. Endocrinology (adults, children).
- 53. Occupational therapy.

#### 54. Nuclear medicine.

#### Chapter 2. Specializations of employees with higher and postgraduate medical education

- 55. Aviation and space medicine.
- 56. Allergology and immunology (children).
- 57. Allergology and immunology (children).
- 58. Anesthesiology and resuscitation (children).
- 59. Arrhythmology.
- 60. Pediatric combustiology.
- 61. Pediatric surgery.
- 62. Bariatric and metabolic surgery.
- 63. Vitreoretinal surgery.
- 64. Gastroenterology (children).
- 65. Hematology (children).
- 66. Homeopathy.
- 67. Hepatology.
- 68. Geriatrics.
- 69. Hirudotherapy.
- 70. Personalized medicine.
- 71. Dermatovenerology (children).
- 72. Dermatocosmetology.
- 73. Traditional medicine.
- 74. Functional diagnostics of the cardiovascular system.
- 75. Interventional arrhythmology.
- 76. Interventional cardiology.
- 77. Interventional radiology.
- 78. Infectious diseases (children).
- 79. Epidemiology of infectious diseases.
- 80. Cardiology (children).
- 81. Cardiac surgery (children).
- 82. Occupational pathology.
- 83. Clinical dietetics.
- 84. Clinical neurophysiology.
- 85. Clinical toxicology.
- 86. Coloproctology.
- 87. Computer diagnostics.
- 88. Intensive care (children).
- 89. Intensive care and neonatal resuscitation.
- 90. Magnetic nuclear diagnostics.

- 91. Mammology.
- 92. Manual therapy.
- 93. Medical genetics.
- 94. Medical rehabilitation (children).
- 95. Medical and forensic examination.
- 96. Narcology.
- 97. Neurology (children).
- 98. Transplantology according to the profile of the main specialty.
- 99. Neuropsychiatry (children).
- 100. Neurosurgery (children).
- 101. Neonatal surgery.
- 102. Nephrology (children).
- 103. Functional diagnostics in nephrology.
- 104. Oncological gynecology.
- 105. Oncological pharmacology.
- 106. Oncological surgery.
- 107. Oncomorphology.
- 108. Otorhinolaryngology (children).
- 109. Ophthalmology (children).
- 110. Pathomorphology.
- 111. Perfusion.
- 112. Plastic surgery (children).
- 113. Psychiatry (children).
- 114. Psychopharmacology.
- 115. Pulmonology (children).
- 116. Radiation medicine and hygiene.
- 117. Radiation pharmacy.
- 118. Radionuclide diagnostics.
- 119. Radionuclide therapy.
- 120. Rheumatology (children).
- 121. X-ray diagnostics.
- 122. Reflexology.
- 123. Sexopathology.
- 124. Forensic biology and histology.
- 125. Forensic medical examination.
- 126. Forensic narcological examination (adults, children)
- 127. Forensic psychiatric examination (adults, children)
- 128. Sports medicine.
- 129. Su-jok therapy.

- 130. Toxicology (children).
- 131. Thoracic surgery.
- 132. Traumatology orthopedics (children's).
- 133. Transplant coordination.
- 134. Transfusiology.
- 135. Functional diagnostics of the respiratory system.
- 136. Ultrasound diagnostics.
- 137. Urology and andrology (children).
- 138. Herbal medicine.
- 139. Phlebology.
- 140. Phthisiology (children).
- 141. Phthisiology.
- 142. Endocrinology (children).
- 143. Nuclear medicine.

# Chapter 3. Specialties of employees with post-secondary medical education

144. Nursing (applied Bachelor's degree).

#### Chapter 4. Specialties of employees with technical and professional medical education

- 145. Obstetrics.
- 146. General medicine.
- 147. Laboratory diagnostics.
- 148. Medical optics.
- 149. Nursing.
- 150. Dentistry.
- 151. Orthopedic dentistry.

# Chapter 5. Specializations of employees with technical and professional medical education

- 152. Laboratory science in a bacteriological laboratory.
- 153. Classic and therapeutic massage.
- 154. Nursing (general practice nurse).
- 155. Nursing in school medicine.
- 156. Laboratory science in the pathology bureau.
- 157. Nursing in radiology.
- 158. Laboratory science in cytology, histology.

# Chapter 6. Specialties of employees with higher and postgraduate education in the field of public health and healthcare management, sanitary-epidemiological profile

- 159. Biomedicine.
- 160. Hygiene-epidemiology.
- 161. Healthcare management.
- 162. Social work in healthcare.
- 163. Public health.
- 164. Public health protection.
- 165. Medical and preventive care.

# Chapter 7. Specializations of employees with higher and postgraduate education in the field of public health, public health protection, medical and preventive care, sanitary and epidemiological profile

- 166. Bacteriology.
- 167. Hygiene of children and adolescents.
- 168. Virology.
- 169. Disinfection business.
- 170. Healthcare management.
- 171. Occupational hygiene.
- 172. Laboratory science.
- 173. Communal hygiene
- 174. Microbiology.
- 175. Nutritionology.
- 176. Industrial hygiene.
- 177. Parasitology.
- 178. Biosafety when working with microorganisms of pathogenicity group II.
- 179. Biosafety when working with particularly dangerous microorganisms of pathogenicity group II (cholera).
  - 180. Field biosafety when working with microorganisms of I-II pathogenicity groups.
- 181. Biosafety when working with microorganisms of pathogenicity groups I-II (plague, cholera).
  - 182. Radiation hygiene.
  - 183. Laboratory science in a sanitary and hygienic laboratory.
  - 184. Food hygiene.
  - 185. Toxicology.
  - 186. Epidemiology.

# Chapter 8. Specializations of employees with higher and postgraduate non-medical education

- 187. Bioengineering.
- 188. Bioinformatics.

- 189. Bioethics.
- 190. IT in healthcare (IT technologies).
- 191. Medical technics.
- 192. Medical law.
- 193. Psychology.
- 194. Medical technics engineering.

# Chapter 9. Specialties of employees with technical and vocational education in the sanitary and epidemiological profile

195. Hygiene and epidemiology.

# Chapter 10. Specializations of employees with technical and vocational education in the sanitary and epidemiological profile

- 196. Bacteriology.
- 197. Virology.
- 198. Disinfection business.
- 199. Occupational hygiene.
- 200. General hygiene.
- 201. Communal hygiene.
- 202. Microbiology.
- 203. Parasitology.
- 204. Biosafety when working with microorganisms of pathogenicity groups I-II.
- 205. Radiation hygiene.
- 206. Laboratory science in sanitary and hygienic examination.
- 207. Food hygiene.
- 208. Toxicology.
- 209. Epidemiology.
- 210. Hygiene of children and adolescents.

# Chapter 11. Specialties of employees with higher and postgraduate pharmaceutical education

211. Pharmacy.

# Chapter 12. Specializations of employees with higher and postgraduate pharmaceutical education

- 212. Clinical pharmacy.
- 213. Radiation pharmacy.
- 214. Management in pharmacy.
- 215. Quality management in pharmacy.

# Chapter 13. Specialties of employees with technical and professional pharmaceutical education

Appendix 2 to the order of the Minister of Healthcare of the Republic of Kazakhstan dated December 21, 2020 № KR HCM-305/2020

#### The nomenclature of positions for healthcare employees

Footnote. The nomenclature is in the wording of the order of the Minister of Healthcare of the Republic of Kazakhstan dated 14.04.2023 № 72 (shall be enforced upon expiry of sixty calendar days after the day of its first official publication).

#### Chapter 1. Positions of managers

- 1. The head of a healthcare organization (general director, director) of republican, regional, district and city significance and (or) a healthcare organization that carries out informatization in the field of healthcare and (or) an organization of republican significance in the field of circulation of medicines and medical devices and (or) healthcare organizations operating in the field of sanitary and epidemiological welfare of the population, nuclear medicine.
- 2. Deputy head (of a general director or director) of a healthcare organization (for medical part, for quality control of medical services, for strategic development, for organizational and methodological work, for anti-epidemic work) or a healthcare organization that carries out informatization in the field of healthcare or an organization in the field of circulation of medicines and medical devices and (or) healthcare organizations operating in the field of sanitary and epidemiological welfare of the population (for sanitary and epidemiological work).
- 3. Deputy head (of a general director or director) of a healthcare organization for economic and administrative support.
- 4. Head of a structural unit of a healthcare organization (senior doctor, head of a clinical (paraclinical) unit (department), head of department, senior (senior) nurse (male nurse) medical (medical) (senior paramedic, senior obstetrician), nursing manager, head or the head of the laboratory, the head of the laboratory of the organization of sanitary-epidemiological service, the head of microbiological laboratory of the organization of sanitary-epidemiological service, the head of the department of reception and sampling in the organization of sanitary-epidemiological service, the head of the department of sanitary-epidemiological and laboratory analytics, the head of the department of metrology and technical maintenance in the field of sanitary and epidemiological service).
  - 5. Deputy director for nursing.

#### 6. Chief medical nurse.

# Chapter 2. Positions of specialists with higher and postgraduate medical education, education in the field of public health and healthcare management, sanitary and epidemiological profile

- 7. Local doctor and (or) general practitioner.
- 8. Doctor (profile specialist).
- 9. Expert doctor.
- 10. Forensic medical expert (of general expert examination, forensic biological examination, forensic histological examination, chemical toxicological examination, medical forensic examination, molecular genetic examination).
- 11. Specialist forensic expert (of forensic biological, chemical toxicological, molecular genetic examinations).
  - 12. Transplant coordinator doctor.
  - 13. Resident doctor.
  - 14. Trainee doctor.
- 15. Healthcare manager (for the quality of medical services, for the strategy and marketing of medical services, for the organization and methodology of providing medical services, for personnel (HR manager).
- 16. Doctor or public healthcare specialist (valeologist, epidemiologist, statistician, methodologist).
  - 17. Doctor or specialist of sanitary and epidemiological service.
- 18. Nurse (male nurse) senior (senior) medical (medical) (senior paramedic, senior obstetrician).
  - 19. Auditor of the sanitary and epidemiological service.
  - 20. Specialist in biosafety in the organization of sanitary and epidemiological services.
  - 21. Specialist in reception and sampling\*.
  - 22. VAD coordinator (VAD) (specialist in mechanical circulatory support).

# Chapter 3. Positions of specialists with higher pharmaceutical education

- 23. Pharmacist (senior pharmacist).
- 24. Technological engineer for the production of medicines and medical devices.
- 25. Quality management manager in pharmacy.
- 26. Clinical pharmacist.
- 27. Radiopharmacist.
- 28. Inspector.
- 29. Senior radiopharmacist.

## Chapter 4. Positions of specialists with higher non-medical education

- 30. Laboratory specialist.
- 31. Specialist of sanitary and epidemiological service (biologist, zoologist or epizootologist, entomologist).
  - 32. Biosafety specialist in the organization of sanitary and epidemiological services.
  - 33. Social work specialist in the field of healthcare.
  - 34. Medical psychologist.
  - 35. Cyclotron engineer for the production of radiopharmaceuticals.
  - 36. Radiochemist-technologist for the production of radiopharmaceuticals.
  - 37. Radiochemist-analyst for quality control of radiopharmaceuticals.
  - 38. Quality assurance specialist for radiopharmaceuticals.
- 39. Engineer for ventilation maintenance of facilities with open sources of ionizing radiation.
- 40. Engineer for the maintenance of systems for the collection, storage, and discharge of liquid radioactive waste.
  - 41. Engineer for radiation safety.
  - 42. Medical physicist.
  - 43. Engineer for the maintenance of technological and medical gases in nuclear medicine.
  - 44. Engineer for water supply and sanitation in nuclear medicine.
  - 45. Engineer for heat supply, ventilation and air conditioning systems in nuclear medicine
  - 46. Engineer of control and measuring devices and automation in nuclear medicine.
  - 47. Engineer-technologist in nuclear medicine.
  - 48. Engineer-medical physicist.
  - 49. Engineer for the maintenance of radiation equipment.
  - 50. Clinical embryologist.
  - 51. Quality specialist in the field of sanitary and epidemiological service.
  - 52. Quality manager in the field of sanitary and epidemiological service.
  - 53. Dosimetrist engineer in the field of sanitary and epidemiological service.
  - 54. Service engineer in the field of sanitary and epidemiological service.

# Chapter 5. Position of specialists with post-secondary medical education

55. Nurse (male nurse) medical (medical) of extended practice.

# Chapter 6.

Positions of specialists with technical and professional medical education, sanitary and epidemiological education

- 56. Paramedic.
- 57. Obstetrician (midwife).

- 58. Nurse (male nurse) medical (medical) district (district) and (or) nurse (male nurse) medical (medical) of general practice.
  - 58-1. Patronage nurse (patronage nurse/male nurse).

Footnote. Paragraph 58-1 is in the wording of the Order № 66 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated 16 July 2025 (shall enter into force upon expiry of ten calendar days after the date of its first official publication).

- 59. Nurse (male nurse) medical (medical) (specialized (specialized)).
- 60. Nurse (male nurse) medical (medical) of a medical station in educational organizations.
  - 61. Diet nurse.
  - 62. Dental hygienist.
  - 63. Dentist.
  - 64. Dental doctor assistant (dental assistant).
  - 65. Dental technician (laboratory assistant in the denture department, office).
  - 66. Medical laboratory assistant.
  - 67. X-ray technician.
  - 68. Optician and optometrist.
  - 69. Physical therapy instructor.
  - 70. Medical registrar.
  - 71. Assistant epidemiologist.
  - 72. Instructor-disinfector.
  - 73. Social worker in the field of healthcare.
  - 74. Nurse (male nurse) junior (junior) medical (medical).
  - 75. Medical massage therapist.
  - 76. Senior medical laboratory assistant.
  - 77. Laboratory assistant for radioisotope (radionuclide) diagnostics.
  - 78. Medical nurse (male brother) of radiation equipment (radiotherapy technologist).
  - 79. Laboratory assistant for sanitary and epidemiological profile.

# Chapter 7. Positions of specialists with technical and professional pharmaceutical education

80. Pharmacist.

# Chapter 8. Junior staff positions

81. Corpsman (junior nurse).

# Chapter 9. Positions of specialists with technical and professional non-medical education

- 82. Laboratory assistant for quality control of radiopharmaceutical medicines.
- 83. Technician of control and measuring devices and automation in nuclear medicine.

- 84. Technician for heat supply, ventilation and air conditioning systems in nuclear medicine.
  - 85. Technician for water supply and sanitation in nuclear medicine.
  - 86. Dosimetric technician in the field of sanitary and epidemiological service.
  - 87. Assistant of an entomologist (zoologist).

Appendix 3 to the order of the Minister of Healthcare of the Republic of Kazakhstan dated December 21, 2020 № KR HCM-305/2020

#### Qualification characteristics of positions of the healthcare system employees

Footnote. The title is in the wording of the Order № 66 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated 16 July 2025 (shall enter into force upon expiry of ten calendar days after its first official publication).

Footnote. Qualification characteristics are in the wording of the order of the Minister of Healthcare of the Republic of Kazakhstan dated 14.04.2023 № 72 (shall be enforced upon expiry of sixty calendar days after the day of its first official publication).

## Chapter 1. Introduction

1. Qualification characteristics (hereinafter - Qualification characteristics) of positions of the healthcare system employees serve as the basis for the development of regulations on structural divisions of healthcare organizations, job descriptions of employees of the healthcare system, containing a specific list of job responsibilities of employees taking into account the specifics of the organization of production, labour and management, their rights and responsibilities, for the selection and placement of personnel, for monitoring the effectiveness of their use, for the certification of employees of healthcare organizations for compliance with the positions held.

Footnote. Paragraph 1 is in the wording of the Order № 66 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated 16 July 2025 (shall enter into force upon expiry of ten calendar days after the date of its first official publication).

- 2. The qualification characteristics of specialist positions: of an accountant, an economist, a lawyer, a human resources specialist, a translator, a psychologist and other specialists have been determined in the qualification characteristics of individual positions of specialists from state agencies and state-owned enterprises, common to all areas of activity.
- 3. Specialists with higher education in the relevant field may apply for the positions of specialists with technical and vocational, post-secondary education in accordance with the qualification requirements.

#### Chapter 2.

Qualification characteristics of management positions, specialists from healthcare organizations of the republican,

regional, district and city significance and (or) healthcare organization carrying out informatization in the field of healthcare

and (or) organization of republican significance in the field of circulation of medicines and medical devices and (or) healthcare

organization operating in the field of sanitary and epidemiological welfare of the population, nuclear medicine Paragraph 1. Head of the organization (CEO, director) of healthcare organizations of the republican, regional, district and city significance and (or) healthcare organization carrying out informatization in the field of healthcare and (or) organizations of republican significance in the field of circulation of medicines and medical devices and (or) healthcare organization

operating in the field of sanitary and epidemiological welfare of the population, nuclear medicine

#### 4. Job responsibilities:

Manages the production, financial and economic activities of a healthcare organization, is responsible for the management decisions made, the safety and effective use of the organization's property, as well as for the results of financial and economic activities.

Determines the policy, strategy of the organization and the mechanism for its implementation. Ensures the introduction of new and improvement of existing organizational forms and methods of work of personnel aimed at further increasing the efficiency and quality of diagnostic, therapeutic and preventive care provided, improving the quality and competitiveness of the services provided.

Ensures effective interaction between the structural divisions of the organization, directs their actions to the development and improvement of the medical services provided.

Bears personal responsibility for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and those subordinate to him.

Takes measures to provide the organization with qualified personnel, the rational use of their professional knowledge and experience, the creation of working conditions that are safe for life and health, and the formation of a favorable psychological atmosphere in the team. Based on the analysis of the organization's activities and assessment of its performance indicators, he (she) takes the necessary measures to improve the forms and methods of the organization's work. Based on the principles of social partnership, ensures the development, conclusion and implementation of a collective agreement, compliance with labor discipline, promotes the development of labor motivation, initiative and activity of employees.

Coordinates work on the study and assessment of sanitary and epidemiological situations, determines priority factors of adverse effects on human health. Takes effective measures to improve the sanitary and epidemiological situation.

Organizes operational and laboratory-instrumental control and supervision of hygienic and anti-epidemic measures, compliance with sanitary rules and regulations and hygienic standards.

Ensures compliance with the requirements of medical ethics, legality in the activities of the organization, including in matters of financial and economic management, strengthening contractual and financial discipline, regulation of social and labor relations.

Carries out the hiring and dismissal of employees. Concludes contracts and makes transactions with individuals and legal entities. Issues decrees and orders on the issues within its competence that are binding on all employees.

Represents the organization in state bodies, organizations and courts. Ensures compliance with medical ethics, internal labor regulations, technical operation of devices, equipment and mechanisms, compliance with fire safety, labor safety and health, sanitary and epidemiological regime. Ensures timely reporting to the organization.

For the head of a healthcare organization operating in the field of nuclear medicine (director or chief physician) (additionally):

Organizes and controls the process of ensuring the functioning of the pharmaceutical system in accordance with the standards of good pharmaceutical practices.

Plans the scope of radioisotope researches, radionuclide therapy, and production of radiopharmaceuticals.

Monitors production risk analysis and conducts quality review analysis of manufactured radiopharmaceuticals.

#### 5. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Public Procurement", the Law of the Republic of Kazakhstan "On Counteraction the Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On Approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

strategic and organizational aspects of modern management activities;

fundamentals of planning, economic and financial activities of healthcare organizations; economic methods of management and analysis of the organization's activities;

the state of medical services market;

best practices in human resource management in healthcare;

statistics, criteria and indicators characterizing the health status of the population;

modern scientific achievements of domestic medicine, the best international experience in healthcare management;

rules and regulations on occupational safety and health, industrial sanitation and fire safety;

organization of activities in emergency situations.

6. Qualification requirements:

For the head of a healthcare organization of republican significance (CEO or director):

higher education in the field of training "Healthcare", a certificate of advanced training (retraining) in the specialty "Healthcare Management" ("Public Health Protection") and (or) a diploma (or certificate) of qualification in the relevant specialty;

or higher education in the field of preparation "Healthcare", postgraduate education in the field of training "Healthcare", or "Business and Law" or an executive MBA degree (hereinafter - EMBA (executive MBIA)) or full-time (Fultime);

or higher education in the field of training "Business, Management and Law" and postgraduate education in the field of training "Healthcare";

certificate of a manager in the field of healthcare;

at least 5 years of experience in management positions.

For the head of an organization of republican significance (general director or director) in the field of circulation of medicines and medical devices:

higher education in the field of training "Healthcare", a certificate of advanced training (retraining) in the specialty "Healthcare Management" ("Public Healthcare") and (or) a diploma (or certificate) of qualification in the relevant specialty;

or higher education in the field of preparation "Healthcare", postgraduate education in the field of training "Healthcare", or "Business and Law" or an EMBA degree or full-time (Fultime);

or higher education in the field of training "Business, Management and Law" and postgraduate education in the field of training "Healthcare";

a certificate of a manager in the field of healthcare;

at least 5 years of experience in management positions.

For the head of an organization of republican significance (general director or director) carrying out informatization in the field of healthcare:

higher (and (or) postgraduate) education in the field of training "Healthcare" and (or) "Information and communication technologies" and (or) EMBA degree or full-time (Fultime), work experience in managerial positions in the profile of at least 5 years.

For the head of a healthcare organization of regional significance, cities of republican significance (director):

higher education in the field of training "Healthcare", a certificate of advanced training (retraining) in the specialty "Healthcare Management" ("Public Healthcare") and (or) a diploma (or certificate) of qualification in the relevant specialty;

or higher education in the field of training "Healthcare", postgraduate education in the field of training "Healthcare", or "Business and Law" or an EMBA degree or full-time (Fultime);

or higher education in the field of training "Business, Management and Law" and postgraduate education in the field of study "Healthcare" or an EMBA degree or full-time (Fultime);

a certificate of a manager in the field of healthcare;

At least 3 years of experience in management positions.

For the head of a healthcare organization of district and city significance (director or chief physician):

higher education in the field of training "Healthcare", a certificate of completion of a certification course for advanced training (retraining) in the specialty "Healthcare Management" ("Public Healthcare") and (or) a diploma (or certificate) of qualification in the relevant specialty;

or higher education in the field of preparation "Healthcare", postgraduate education in the field of training "Healthcare", or "Business and Law" or an EMBA degree or full-time (Fultime);

or higher education in the field of training "Business, Management and Law" and postgraduate education in the field of training "Healthcare" or an EMBA degree or full-time (Fultime);

a certificate of a manager in the field of healthcare;

At least 2 years of experience in management positions.

For the head of a healthcare organization operating in the field of sanitary and epidemiological welfare of the population of republican significance (general director or director):

higher education in the field of training "Medical and Preventive Affairs" and (or) "Sanitation, Hygiene, Epidemiology" and (or) "Public Health" and (or) "Public Healthcare", a certificate of qualification in the relevant specialty "Hygiene, Epidemiology" ", and (or) postgraduate education in the field of training "Healthcare" and (or) an EMBA degree or full-time (Fultime), work experience in management positions of at least 5 years.

For the head of a healthcare organization operating in the field of sanitary and epidemiological welfare of the population of regional significance, cities of republican significance (director):

higher education in the field of training "Medical and Preventive Affairs" and (or) "Sanitation, Hygiene, Epidemiology" and (or) "Public Health" and (or) Public Healthcare", a certificate of qualification in the relevant specialty "Hygiene, Epidemiology" " and (or) postgraduate education in the field of training "Healthcare", work experience in management positions of at least 3 years.

For the head of healthcare organizations carrying out activities in the field of sanitary and epidemiological welfare of the population of district and city significance (director):

higher education in the field of training "Medical and Preventive Affairs" and (or) "Sanitation, Hygiene, Epidemiology" and (or) "Public Health" and (or) "Public Healthcare", a certificate of qualification in the relevant specialty "Hygiene, Epidemiology" ", work experience in management positions for at least 2 years.

For the head of a healthcare organization operating in the field of nuclear medicine (director or chief physician):

higher education in the field of training "Healthcare";

postgraduate education in the field of training "Healthcare" and (or) "Business, Management and Law" or an EMBA degree or full-time (Fultime);

a certificate of advanced training (retraining) in the specialty "Healthcare Management" ("Public Healthcare", "Radiation Diagnostics", "Radiology", "Nuclear Medicine", "Radiation Therapy" or "Radiation Oncology");

a certificate of a manager in the field of healthcare;

At least 5 years of experience in management positions.

Paragraph 2. Deputy head (of a CEO or director) of a healthcare organization (on medical part, on quality control of medical services, on strategic development, on organizational and methodological

work, on anti-epidemic work) and (or) healthcare organization, carrying out informatization in the field

of healthcare and (or) organization in the field of circulation of medicines and medical devices and (or)

organization of healthcare operating in the field of sanitary and epidemiological welfare of the population

(for sanitary and epidemiological work)

# 7. Job responsibilities:

Provides management of the activities of structural units of the healthcare organization subordinate to him, organizes their work and effective interaction, systematic monitoring of the quality of medical services provided.

Carries out organizational work on planning the medical and diagnostic activities of the organization, analysis of medical activities of the organization, study and assessment of the sanitary and epidemiological situation.

Bears personal responsibility for the material, technical and medicinal resources entrusted to him, as well as responsibility for their safety and intended use, for compliance with anti-corruption legislation, and for taking measures to prevent corruption on his part and those subordinate to him.

Ensures the improvement of the quality and competitiveness of medical services provided, the introduction of new and improvement of existing organizational forms and methods of work of personnel.

Provides operational and laboratory-instrumental control and supervision of the implementation of hygienic and anti-epidemic measures, compliance with sanitary rules and hygienic standards. Plans and ensures the implementation of measures for sanitary and hygienic education of the population.

Ensures rational placement and organization of work of medical personnel, development of their professional knowledge and experience.

Organizes the maintenance of statistical records and reporting on the organization's activities.

Participates in the development of an effective management program, ensures assessment of the quality of management based on the results of assessment and monitoring of the activity development process; analyzes socio-economic indicators of work, conducts a comparative analysis of its competitiveness.

Selects a strategy and determines the priorities for the development of the organization, determines methods for achieving goals, and justifies the choice of goals. Organizes activities to monitor the implementation by structural divisions of the organization of strategic goals, objectives and activities of the development plan, to generate reports on the implementation of the Annual operational plan, Plan of development and strategy (strategic plan) for development of the organization with proposals for further development prospects, provides management with draft management decisions on the issues of strategic development organizations.

Participates in the formation and implementation of personnel policies, in the management and development of personnel and in the regulation of labor relations.

Creates working conditions that are safe and favorable for life and health, and creates a favorable psychological atmosphere in the team.

Represents the organization within its competence in state bodies, organizations and courts.

Ensures compliance with labor discipline, promotes the development of labor motivation, initiative and activity of workers, medical ethics, compliance with the requirements of internal labor regulations, compliance with fire safety, occupational safety and health, sanitary and epidemiological regime.

Deputy head for organizational, methodological and anti-epidemic work of a healthcare organization:

Carries out the organization and coordination of anti-epidemic work, organizational and methodological work, as well as management and coordination of the activities of all divisions of the organization in drawing up long-term activity plans, intersectoral and interdepartmental interaction.

Provides methodological assistance to healthcare organizations, public associations and various departments on the prevention of HIV infection, organizes and conducts sanitary and epidemiological monitoring of the incidence and prevalence of infections.

Provides control over the timely submission of accounting and reporting documentation used in the organization, epidemiological investigation of new registered cases of infection, and analysis of activities by sections of work.

Coordinates activities to carry out preventive work among the population and key groups.

Develops a long-term and current plan for the organization's activities.

Coordinates events conducted through the media and social networks.

#### 8. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Public Procurement", the Law of the Republic of Kazakhstan "On Combating Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the Decree of the Government of the Republic of Kazakhstan dated October 12, 2021 № 725 "On approval of the national project "Quality and affordable healthcare for every citizen" "Healthy Nation", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

strategic and organizational aspects of modern management activities;

fundamentals of planning, economic and financial activities of healthcare organizations; state of the market of medical services;

best practices in human resource management in healthcare;

statistics, criteria and indicators characterizing the health status of the population;

modern scientific achievements of domestic medicine;

procedures and standards for occupational safety and health, industrial sanitation and fire safety;

organization of activities in emergency situations;

organization of health education, hygienic education of the population and promotion of a healthy lifestyle.

# 9. Qualification requirements:

For the deputy head (of a CEO and (or) director) of a healthcare organization (medical department):

higher education in the field of training "Healthcare";

certificate of qualification in the specialty "Healthcare Management" ("Public Healthcare") or postgraduate education in the field of training "Healthcare" or "Business, Management and Law" or an EMBA degree or full-time (Fultime);

and or a certificate of advanced training (retraining) in the specialty "Health Management" ("Public Healthcare");

a certificate of a healthcare specialist in the relevant specialty;

work experience in senior positions in the field of healthcare for organizations of republican and regional significance (city of republican significance, capital) of at least 3 years, for organizations of district and city significance of at least 2 years.

For the deputy head (of a CEO and (or) director) of a healthcare organization (for quality control of medical services, for strategic development):

higher education in the field of training "Healthcare" and a certificate of qualification in the specialty "Health Management" ("Public Healthcare") or postgraduate education in the field of training "Healthcare" or "Business, Management and Law" or an EMBA degree or full-time (Fulltime);

or higher education in the field of training "Business, Management and Law" and postgraduate education in the field of training "Healthcare";

a certificate of advanced training (retraining) in the specialty "Healthcare Management" ("Public Healthcare");

work experience in management positions in the field of healthcare for organizations of republican and regional significance (city of republican significance, capital) of at least 3 years, for organizations of district and city significance of at least 2 years.

Deputy head of the organization in the field of circulation of medicines and medical devices:

higher education in the field of training "Healthcare" and a certificate of qualification in the specialty "Health Management" ("Public Healthcare") or postgraduate education in the field of training "Healthcare" or "Business, Management and Law" or an EMBA degree or full-time (Fulltime);

or higher education in the field of training "Business, Management and Law" and postgraduate education in the field of training "Healthcare";

a certificate of advanced training (retraining) in the specialty "Healthcare Management" ("Public Healthcare");

at least 3 years of experience in management positions in healthcare.

Deputy head of a healthcare organization implementing informatization in the field of healthcare:

higher (and/or postgraduate) education in the field of training "Healthcare" and (or) "Information and communication technologies" and (or) EMBA degree or full-time (Fultime), work experience in managerial positions in the profile of at least 2 years.

Deputy head for organizational, methodological and anti-epidemic work of a healthcare organization:

higher education in the field of training "Healthcare" and a certificate of qualification in the specialty "Health Management" ("Public Healthcare") or postgraduate education in the field of training "Healthcare" or "Business, Management and Law" or an EMBA degree or full-time (Fulltime);

or higher education in the field of training "Business, Management and Law" and postgraduate education in the field of training "Healthcare";

a certificate of advanced training (retraining) in the specialty "Healthcare Management" ("Public Healthcare");

at least 2 years of experience in management positions in healthcare.

Deputy head of healthcare organizations operating in the field of sanitary and epidemiological welfare of the population (for sanitary and epidemiological work):

higher education in the specialty "Medical and Preventive Care" and (or) "Sanitation, Hygiene, Epidemiology" and (or) "Public Health" and (or) "Public Healthcare";

a diploma (or certificate) of qualification in the relevant specialty "Hygiene, Epidemiology" and (or) postgraduate education in the field of training "Healthcare" and (or) EMBA degree or full-time (Fultime);

work experience in management positions in the field of healthcare for organizations of republican and regional significance (city of republican significance, capital) of at least 3 years, for organizations of district and city significance of at least 2 years.

# Paragraph 3. Deputy head (of a CEO or director) of a healthcare organization for economic and administrative support

# 10. Job responsibilities:

Carries out the organization and improvement of economic and administrative activities of the organization, methodological guidance and coordination of the activities of all divisions of the organization in drawing up long-term activity plans.

Ensures compliance with financial discipline, control over the implementation of planned targets, organizes a comprehensive economic analysis and assessment of results of the financial and economic activities of the organization.

Bears personal responsibility for the material and technical resources entrusted to him, as well as responsibility for their safety and intended use, for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and those subordinate to him.

Organizes the development of methodological materials on economic planning of the work of structural divisions of the organization, conducting a comprehensive analysis of assessing the results of administrative and economic activities of the organization.

Ensures compliance with the requirements of medical ethics, the regime for saving material and labor resources of the organization, makes proposals aimed at increasing labor efficiency, economic independence of the organization, compliance with labor discipline, requirements of internal labor regulations, fire safety, occupational safety and health, sanitary and epidemiological regime.

Ensures the maintenance and timely submission of planning, accounting, and reporting documentation used in the organization, prepares proposals aimed at increasing labor efficiency, financial and economic independence of the organization.

Represents the organization within its competence in state bodies, organizations and courts.

Develops measures for the use of on-farm reserves, certification and rationalization of workplaces.

#### 11. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Taxes and Other Obligatory Payments to the Budget (Tax Code)", the Code of the Republic of Kazakhstan "On Public Health and Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Accounting and Financial Reporting", the Law of the Republic of Kazakhstan "On Public Procurement", the Law of the Republic of Kazakhstan "On Anti-Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the Decree of the Government of the Republic of Kazakhstan dated 12 October 2021 № 725 "On approval of the national project "Quality and affordable healthcare for every citizen" "Healthy Nation", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts № 26867);

strategic and organizational aspects of modern management activities;

fundamentals of planning, economic and financial activities of healthcare organizations; procedures and standards for occupational safety and health, industrial sanitation and fire safety;

organization of activities in emergency situations.

# 12. Qualification requirements:

higher (and/or) postgraduate education in the field of training "Business, Management and Law" (economic, financial, legal) or engineering and work experience in managerial positions in the profile or in the field of healthcare for at least 5 years or with additional availability of Master's degree in the specialties "Public Healthcare", "Healthcare Management", work experience in managerial positions in the profile or in the field of healthcare for at least 3 years.

#### Paragraph 4.

Head of a structural unit of a healthcare organization (senior doctor, head of clinical (paraclinical) unit

(department), head of department, senior (senior) nurse (male nurse) medical (medical) (senior paramedic,

senior obstetrician),nursing manager, head of the laboratory for organization of sanitary and epidemiological service,

head of the vivarium of the sanitary-epidemiological service organization, head of the microbiological

laboratory of an organization in the field of sanitary and epidemiological welfare of the population), head

of the department of reception and sampling in the organization of sanitary-epidemiological service, head

of the department of sanitary-epidemiological and laboratory analytics, head of the department of metrology and technical maintenance in the field of sanitary and epidemiological service) \*

### 13. Job responsibilities:

Manages a structural unit of the organization, organizes the work and effective interaction of structural units to provide timely and high-quality medical and medicinal care to the population.

Ensures compliance with medical ethics requirements.

Bears personal responsibility for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and those subordinate to him, for the material, technical, and medicinal resources entrusted to him, as well as responsibility for their safety and intended use.

Determines the policy, strategy for the activities of a structural unit of a healthcare organization and the mechanism for its implementation.

Takes measures to provide the organization with qualified personnel, the rational use of their professional knowledge and experience, the creation of safe and healthy conditions for their life and work, and the formation of a favorable psychological atmosphere in the team.

Ensures the introduction of new and improvement of existing diagnostic, therapeutic and preventive care, improving the quality and competitiveness of the services provided.

Organizes work to study and assess sanitary and epidemiological situations.

Takes effective measures to improve the sanitary and epidemiological situation.

Organizes operational and laboratory-instrumental control over the implementation of hygienic and anti-epidemic measures, over compliance with sanitary rules, norms and hygienic standards.

Provides work to improve the qualifications of medical personnel and develop their professional knowledge.

Analyzes the activities of a structural unit of a healthcare organization and, based on an assessment of its performance indicators, takes the necessary measures to improve the forms and methods of work of the organization.

Ensures compliance with internal labor regulations, compliance with medical ethics, fire and safety regulations, and sanitary and epidemiological regulations.

Provides reporting.

For the head of the department of radioisotope (radionuclide) diagnostics, department of radioisotope (radionuclide) therapy, department (complex) of production and quality control of radiopharmaceuticals, department (department) of production of radiopharmaceuticals, department (branch) of quality assurance according to good manufacturing practice "GMP" (GMP), the department of radiation safety and medical physics, the department of engineering and technical support of the Nuclear Medicine Center (additionally):

organizes and controls the implementation of appropriate validation activities of all equipment, engineering systems and processes;

organizes and controls the process of ensuring the functioning of the pharmaceutical system in accordance with the standards of good pharmaceutical practices and radiation safety

For the head or head of the laboratory (additionally):

ensures timely and high-quality conduct of clinical laboratory tests at the level of modern achievements of medical science and practice;

organizes and controls work in the laboratory, and also conducts laboratory tests of samples to isolate pathogenic microorganisms;

brings to the attention of laboratory employees all regulatory and organizational-administrative documents regulating the work of the laboratory;

evaluates, interprets laboratory results, draws conclusions;

controls the implementation of internal laboratory quality control and ensures the laboratory's participation in external quality assessment programs.

For the head of the department for reception and sampling in the field of sanitary and epidemiological service (additionally):

manages the department for receiving and sampling samples;

organizes operational management of the processes of acceptance, selection and delivery of samples (procedures for handling samples potentially containing pathogenic microorganisms), distributes samples among laboratories;

organizes work on issuing test reports;

ensures timely and high-quality execution of department documentation;

conducts analysis and prepares reports on department activities;

ensures compliance with the requirements of internal labor regulations, fire safety and safety regulations, sanitary and epidemiological regime;

coordinates own work with other departments of the laboratory on the implementation of studies, deadlines and issuance of protocols;

For the head of the department of sanitary-epidemiological and laboratory analytics (additionally):

prepares and ensures the execution of work plans, activities and reporting documentation of the department;

participates in the development and implementation of measures to improve the efficiency of state laboratory sanitary and epidemiological examination;

analysis and systematization of technical, economic and socio-economic indicators of the organization's performance, conducting a comparative analysis of its competitiveness;

analysis of the activities of the organization's laboratory departments, taking the necessary measures to improve the forms and methods of the organization's work based on the assessment of performance indicators;

compiles data on complex software;

For the head of the metrology and technical maintenance department in the field of sanitary and epidemiological service (additionally):

ensuring the activities of the structural unit on issues of metrology, standardization and other issues within the competence of the department;

ensuring and monitoring compliance with the procedure for maintaining internal documents, standards and other regulatory documents;

ensuring interaction with certification and metrology bodies in accordance with the needs of the region;

providing methodological and practical assistance on the issues of metrology and standardization.

#### 14. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Public Procurement", the Law of the Republic of Kazakhstan "On Counteraction Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan"; Decree of the Government of the Republic of Kazakhstan dated October 12, 2021 № 725 "On approval of the national project "Quality and affordable healthcare for every citizen "Healthy Nation", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

strategic and organizational aspects of modern management activities;

the best international experience in medicine;

business processes of a medical organization;

standards of good pharmaceutical practice;

sanitary rules and regulations in the field of radiation safety.

15. Qualification requirements:

For the head of a structural unit of a healthcare organization:

higher education in the field of training "Healthcare";

a certificate of advanced training (retraining) in the specialty "Healthcare Management" ("Public Healthcare") and (or) a certificate of qualification in the relevant specialty (if available );

a certificate of a healthcare specialist in the relevant specialty (for specialties subject to certification);

at least 3 years of experience in management positions or in a healthcare specialty.

For the senior doctor, head of the clinical (paraclinical) unit (department), head of the department:

compliance with the general requirements for the qualifications of a doctor (by profile) of the first (highest) qualification category in clinical specialties (if any) or work experience in the relevant clinical specialty of at least 6 years; specialist certificate for admission to clinical practice.

For the head of the laboratory of the organization of sanitary and epidemiological service, the head of the microbiological laboratory of the organization in the field of sanitary and epidemiological welfare of the population:

higher education in the field of training "Healthcare", a certificate of advanced training in the specialty "Healthcare Management" ("Public Healthcare") and (or) a certificate of advanced training in the relevant specialty;

or higher education in the field of training "Healthcare", postgraduate education in the field of training "Healthcare";

availability of the highest or first qualification category (if any) or work experience of at least 6 years in the relevant specialty,

certificate of a healthcare specialist in the relevant specialty in the service of sanitary and epidemiological welfare of the population,

at least 3 years of work experience in a relevant laboratory.

For the head of the department for reception and sampling in the organization of sanitary-epidemiological service, the head of the department of sanitary-epidemiological and laboratory analytics:

higher education in the field of training "Healthcare" and a certificate of a healthcare specialist in the relevant specialty, a certificate of completion of a certification course in the specialty "Healthcare Management" ("Public Healthcare"), work experience in the specialty of at least 3 years.

For the head of the metrology and technical maintenance department in the field of sanitary and epidemiological service:

higher education in the field of training "Standardization, certification and metrology (by industries)" or higher engineering and technical education with experience in the field of metrology and standardization.

For the senior nurse and/or nursing manager:

higher medical education in the specialty "Nursing" without presenting requirements for work experience or technical and vocational (secondary specialized, secondary vocational), post-secondary (applied Bachelor's degree) medical education and work experience in a medical organization in the specialty of at least 1 year, presence of the first ( highest) qualification category (if available) or work experience in the relevant clinical specialty of at least 6 years, a certificate of advanced training in management activities in nursing.

For heads of departments of non-core activities:

higher (or postgraduate) education in the field.

For the head of the vivarium of the organization of sanitary and epidemiological service:

higher education in the field of training "Healthcare" or "Veterinary Medicine" or "Natural Sciences, Mathematics and Statistics" (biology), work experience in the specialty of at least 3 years.

For the head of the department (complex) of production and quality control of radiopharmaceuticals: higher education in physico-technical, chemical, chemical-technological or pharmaceutical education, work experience in the field of nuclear medicine and (or) production of radiopharmaceuticals and (or) medicines and (or) technical media and (or) accelerating equipment for at least 3 years.

For the head of the department (branch) of production of radiopharmaceuticals: higher education in chemical pharmaceutical or physical-technical education in the field of personnel training, work experience in the field of nuclear medicine and (or) production of radiopharmaceuticals and (or) medicines and (or) technical media and (or) accelerator equipment for at least 3 years.

For the head of the department (branch) of quality control of radiopharmaceuticals: higher chemical, pharmaceutical or biological education in the field of personnel training, work experience in the field of nuclear medicine and (or) production of radiopharmaceuticals and (or) medicines and (or) technical media at least 3 years.

For the head of the department (branch) of quality assurance according to good manufacturing practice "GMP" (GMP): higher education in pharmaceutical, chemical, biological, chemical-technological biological; work experience in the field of nuclear medicine and (or) production of radiopharmaceuticals and (or) production of medicines, medical products, food products and (or) laboratories and (or) pharmaceutical warehouses and pharmacies for at least 3 years.

For the head of the department of radiation safety and medical physics: higher education in physics and technology ("Nuclear Physics", "Physics", "Technical Physics", "Radiation Physics", "Medical Physics"); work experience in radiation safety and (or) medical physics in

the field of nuclear medicine and (or) in the field of handling sources of ionizing radiation for at least 3 years.

For the head of the engineering and technical support department of the Nuclear Medicine Center: higher technical education, work experience in the specialty in the production of radiopharmaceuticals and (or) production of medicines and (or) medical devices and (or) in the field of nuclear medicine, radiation therapy for at least 3 years.

For the head or head of the laboratory: higher education in the field of training in the specialty "Medical Care", "Pediatrics", "General Medicine", "Medical and Biological Care", "Medical and Preventive Care", a certificate of a healthcare specialist in the relevant specialty, certificate of advanced training in the relevant specialty and work experience in management positions or in a specialty in the field of healthcare for at least 3 years.

\*Note:

For positions in which pathogenic biological agents of pathogenicity group I and (or) II are handled, a certificate of a certification course on the handling of pathogenic biological agents and a document on advanced training in the field of biological safety shall be required.

# Paragraph 5. Deputy director of nursing

16. Job responsibilities:

Coordinates the rational organization of work of middle and junior medical personnel. Carries out the development of functional and job responsibilities of middle and junior staff. Develops teamwork skills and professional communication practices among nurses. Conducts an analysis of his work and the work of middle and junior medical personnel.

Develops indicators of the quality of nursing work, organizes the development of standards and algorithms for middle and junior medical personnel.

Plans a systems vision for nursing care as part of the organization's strategic planning.

Monitors clinical activities to identify both expected and unexpected risks.

Ensures reporting, compliance with medical ethics, internal and labor regulations. Organizes compliance with the rules of medical and protective regime, a safe hospital environment. Responsible for coordinating the quality of medical documentation by nursing staff.

Bears personal responsibility for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and those subordinate to him.

Collaborates with nursing education organizations to provide necessary resources to the interprofessional team. Influences nursing practice by participating in professional associations.

Participates in the analysis of complaints and requests from patients regarding the quality of work of nurses, develops and organizes activities to improve the quality of medical services.

The Constitution of the Republic of Kazakhstan, Civil Code of the Republic of Kazakhstan, Labor Code of the Republic of Kazakhstan, Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", Code of the Republic of Kazakhstan "On Administrative Offenses", Law of the Republic of Kazakhstan "On Anti-Corruption", Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan"; Decree of the Government of the Republic of Kazakhstan dated October 12, 2021 № 725 "On approval of the national project "Quality and affordable healthcare for every citizen "Healthy Nation", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

procedures and standards for occupational safety and health, industrial sanitation and fire safety;

organization of activities in emergency situations;

statistics criteria and indicators;

modern scientific achievements of foreign and domestic medicine in the field of nursing; organization of health education, hygienic education of the population and promotion of a healthy lifestyle.

# 18. Qualification requirements:

higher medical education in the specialty "Nursing" (academic Bachelor's degree) or post-secondary education in the specialty "Nursing" (applied Bachelor's degree), first (highest ) qualification category (if any) or work experience in the relevant specialty for at least 6 years and (or ) possession of a Master's degree in the specialty "Nursing", availability of a certificate of advanced training in management activities in nursing;

with postgraduate medical education, a Master's degree in the specialty "Nursing" without presenting requirements for work experience.

# Paragraph 6. Chief medical nurse

# 19. Job responsibilities:

Ensures rational organization of work for middle and junior medical personnel.

Provides general management of the work, organizes and controls the implementation of medical prescriptions by middle and junior medical personnel of the organization, development of functional and job responsibilities of middle and junior medical personnel of the organization, timely discharge, distribution and storage of dressings, medications, including poisonous, psychotropic and narcotic drugs, keeps records of their expenditure.

Ensures the preparation and implementation of work schedules, compliance with the rules of the medical and protective regime, infection control, and discipline.

Monitors the sanitary and hygienic maintenance of hospital departments, timeliness and quality of disinfection of premises (especially of infectious diseases). Monitors the quality of medical documentation by nursing staff.

Develops long-term and current plans for advanced training of middle and junior personnel, evaluates the professional activities of nurses (male nurses), midwives.

Makes proposals to improve the quality of medical care to the population and improve the organization of work.

Ensures reporting, compliance with medical ethics, internal labor regulations, fire safety, occupational safety and health, sanitary and epidemiological regulations.

Bears personal responsibility for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and those subordinate to him.

#### 20. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare system", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Public Procurement", the Law of the Republic of Kazakhstan "On Counteraction Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

organization of planned work of a medical organization;

protocols for diagnosis and treatment in the main clinical areas, general principles and basic methods of clinical, instrumental and laboratory diagnostics;

the basics of organizing medical and preventive care, emergency medical care, and drug provision for the population; procedures and standards for occupational safety and health, industrial sanitation and fire safety;

organization of activities in emergency situations; statistical criteria and indicators characterizing the health status of the population;

modern scientific achievements of foreign and domestic medicine;

organization of health education, hygienic education of the population and promotion of a healthy lifestyle, factors of the human environment;

basics of examination of temporary disability and medical and social examination.

# 21. Qualification requirements:

higher medical education in the specialty "Nursing" (academic Bachelor's degree) or post-secondary education in the specialty "Nursing" (applied Bachelor's degree), a certificate of a healthcare specialist in the specialty "Nursing", a certificate of advanced training in management activities in nursing, work experience in a medical organization in the specialty of at least 1 year;

with postgraduate medical education, a Master's degree in the specialty "Nursing" without presenting requirements for work experience.

# Chapter 3.

Qualification characteristics of positions of specialists with higher education and postgraduate medical education, education in the field of public health and healthcare management, sanitary and epidemiological profile Paragraph 1. District doctor and (or) general practitioner

#### 22. Job responsibilities:

Provides prevention, diagnosis, treatment, and rehabilitation of patients. Provides qualified, emergency and other types of medical care. Determines the tactics of patient management.

Bears personal responsibility for the material, technical and medicinal resources entrusted to him, as well as responsibility for their safety and intended use, for the rational prescription of medicines, for compliance with anti-corruption legislation, and for taking measures to prevent corruption on his part and those subordinate to him.

Develops a plan for examining the patient. Based on clinical observations and examination, medical history, data from clinical, laboratory and instrumental studies, establishes (confirms) the diagnosis.

Informs the patient about the possibility of choosing methods and methods of treatment, as well as the means and medical products used, if such a choice is provided for by the results of examination. Analyzes performance indicators.

Together with health center takes part in promoting a healthy lifestyle and balanced nutrition.

Carries out consulting activities on issues of feeding, hardening, preparing children for preschool institutions, school, family planning, contraception, and immunoprophylaxis.

Conducts work to identify early and latent forms of diseases and risk factors. Organizes a complex of diagnostic, treatment, health and rehabilitation measures.

Conducts pregnancy diagnostics, monitoring the course of pregnancy, identification and treatment of extragenital pathology in pregnant women, and psychoprophylactic preparation for childbirth. Identifies contraindications for pregnancy and childbirth, and refers to termination of pregnancy. Provides rehabilitation to women in the postpartum period and after termination of pregnancy.

Determines the state of disability of patients and refers them to a medical and social examination. Determines indications for transfer to easier working conditions and sanatorium treatment.

Conducts an analysis of the health status of the assigned contingent, maintains medical records.

Complies with medical ethics, internal labor regulations, fire safety, occupational safety and health, sanitary and epidemiological regulations.

#### 23. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare system", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Anti-Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

general principles and basic methods of clinical, instrumental and laboratory diagnostics; the basics of organizing medical and preventive care, emergency medical care, and drug provision for the population;

procedures and standards for occupational safety and health; industrial sanitation and fire safety;

statistical criteria and indicators characterizing the health status of the population;

modern scientific achievements of foreign and domestic medicine, organization of health education, hygienic education of the population and promotion of a healthy lifestyle;

basics of examination of temporary disability and medical and social examination;

basics of international and domestic classification of diseases;

basics of health insurance.

24. Qualification requirements:

higher education in the field of training "Healthcare", a certificate of a specialist in the field of healthcare in the relevant specialty.

# Paragraph 2. Doctor (specialist profile)\*

# 25. Job responsibilities:

Provides emergency, primary health care, and specialized medical care.

Determines the tactics of the patient's management, the plan of his examination.

Bears personal responsibility for the material, technical and medicinal resources entrusted to him, as well as responsibility for their safety and intended use for the rational purpose of medicines, for compliance with anti-corruption legislation and for taking measures to prevent corruption on his part and those subordinate to him.

Based on clinical observations and examination, medical history, data from clinical, laboratory and instrumental studies, establishes (confirms) the diagnosis. Prescribes and monitors appropriate treatment, organizes or independently carries out the necessary diagnostic, therapeutic, rehabilitation and preventive procedures and measures.

Informs the patient about the possibility of choosing methods and ways of treatment, as well as the medicines and medical products used.

Conducts an examination of the patient. Makes changes to the treatment plan depending on the patient's condition and determines the need for additional examination methods.

Monitors the correctness of diagnostic and therapeutic procedures, operation of instruments and equipment.

Plans own work and analyzes performance indicators of own activity.

Introduces modern methods of treatment and prevention of diseases into practice.

Organizes and controls the work of middle and junior medical personnel subordinate to him.

Maintains accounting and reporting medical documentation.

Complies with medical ethics, internal labor regulations, fire safety, occupational safety and health, sanitary and epidemiological regulations.

Organizes and conducts health education for the population and promotes a healthy lifestyle.

#### 26. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Anti-Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

organization of planned work of a medical organization;

general principles and basic methods of clinical, instrumental and laboratory diagnostics; the basics of organizing medical and preventive care, emergency medical care, and drug provision for the population;

procedures and standards for occupational safety and health, industrial sanitation and fire safety;

statistical criteria and indicators characterizing the health status of the population;

organization of health education, hygienic education of the population and promotion of a healthy lifestyle, the basics of international and domestic classification of diseases; basics of examination of temporary disability and medical-social examination;

basics of health insurance.

# 27. Qualification requirements:

higher education in the field of training "Healthcare" and (or) postgraduate education in the relevant specialty, a certificate of a specialist in the field of healthcare in the relevant specialty.

#### \*Note:

Taking into account the epidemiological situation and the infection reproduction rate (the number of people infected by one patient before isolation) - 1.0, as well as the percentage of occupancy of hospital beds - 50% or more, to provide medical care in quarantine facilities (

infectious, provisional, quarantine hospitals) resident doctors with their consent shall be admitted, as well as medical workers, if they have a valid certificate of a specialist in the specialty specified in Appendix 1 of this order.

#### Paragraph 3. Expert doctor

#### 28. Job responsibilities:

Conducts an examination of volumes and quality of medical care provided to the population. Monitors the implementation of volumes of medical services provided to the population. Conducts a retrospective analysis of treatment and diagnostic measures, develops programs for managing the quality of medical care in healthcare organizations.

Interacts with medical and social expert commissions. Introduces innovative technologies in serving the population. Studies the degree of quality of medical services provided to the population, based on the results of the analysis, solves problems (complaints) of patients on the spot.

Ensures timely and high-quality execution of medical documentation.

Complies with medical ethics, internal labor regulations, fire safety, occupational safety and health, sanitary and epidemiological regulations.

Bears personal responsibility for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and those subordinate to him

#### 29. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Anti-Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

organization of planned work of a medical organization;

basics of internal audit, examination of medical activities;

the basics of organizing medical and preventive care, emergency medical care, and drug provision for the population;

procedures and standards for occupational safety and health, industrial sanitation and fire safety;

organization of activities in emergency situations; statistics, criteria and indicators characterizing the health status of the population;

basics of international and domestic classification of diseases; issues of examination of temporary disability and medical and social examination;

basics of health insurance.

# 30. Qualification requirements:

higher education in the field of training "Healthcare", a certificate of a specialist in the field of healthcare in the relevant specialty, the highest qualification category in the relevant specialty (if available) or work experience in the relevant specialty for at least 10 years.

# Paragraph 4. Forensic medical expert (general expert, forensic biological, chemical toxicological, forensic histological, medical-forensic, molecular genetic examinations)

### 31. Job responsibilities:

Carries out a qualified forensic medical examination of all provided objects of expert research according to the profile of the expert unit.

A forensic medical expert of general expert research conducts forensic medical examinations (of a corpse, cadaveric material, living persons to establish harm caused to health and determines the percentage of disability, in case of sexual crimes, based on materials from criminal, administrative and civil cases, in cases of professional activity of medical workers; medical documentation and other types of expert activities) according to the profile of the expert unit.

A person performing laboratory expert activities also performs laboratory tests, measurements during examinations, chemical, physical, photographic research methods, monitors the good condition of laboratory equipment (checks and adjusts it in accordance with instructions and technical documentation).

Carries out consultative assistance to employees of internal affairs bodies, prosecutors and courts. Resolves issues of a medical and biological nature that arise in judicial practice by conducting forensic medical examinations on the principles of legality, independence, objectivity and completeness of researches within special competence. Gives a scientifically substantiated, reasoned and objective written opinion on questions posed to him related to the researches conducted.

Plans own work and analyzes performance indicators of own activity. Bears personal responsibility for the material and technical resources entrusted to him, as well as responsibility for their safety and intended use. Ensures the correct operation of instruments, apparatus and equipment, and the rational use of reagents.

Supervises the work of middle and junior medical personnel. Applies new research methods in practice. Does not disclose information that became known to him in connection with the forensic medical examination.

Provides first aid in emergency situations.

Maintains accounting-reporting medical documentation.

Bears personal responsibility for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and those subordinate to him.

Complies with medical ethics, internal labor regulations, fire safety, occupational safety and health, sanitary and epidemiological regulations.

#### 32. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Public Procurement", the Law of the Republic of Kazakhstan "On Counteraction Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan"; the Criminal Code of the Republic of Kazakhstan, the Criminal Procedure Code of the Republic of Kazakhstan, the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

laboratory expert activities;

procedures and standards for occupational safety and health, industrial sanitation and fire safety;

organization of activities in emergency situations;

basics of international and domestic classification of diseases.

## 33. Qualification requirements:

higher education in the field of training "Healthcare" and postgraduate medical education in the specialty "Forensic Medical Examination",

for a doctor, an expert in general expert research, a certificate of a healthcare specialist in the specialty "Forensic Medical Examination".

## Paragraph 5. Specialist forensic expert\*

(of forensic biological, chemical toxicological, molecular genetic examinations)

## 34. Job responsibilities:

Conducts forensic medical examinations of material evidences assigned to him, including the study of cadaveric material, laboratory expert activities in the profile of the expert unit.

Bears personal responsibility for the material and technical resources entrusted to him, as well as responsibility for their safety and intended use.

Performs laboratory tests, measurements during examinations, photographic and physical methods of researches.

Monitors the good condition of laboratory equipment (checks and adjusts it in accordance with instructions and technical documentation), prepares reagents and chemical glassware for

researches, provides advisory assistance to employees of internal affairs bodies, the prosecutor's office and the court.

Resolves issues of a medical and biological nature that arise in judicial and legal practice by conducting examinations on the principles of legality, independence, objectivity and completeness of research within special competence.

Gives a scientifically substantiated, reasoned and objective written opinion on questions posed to him related to the researches conducted.

Does not disclose information that became known to him in connection with the forensic medical examination.

Ensures timely and high-quality execution of medical documentation.

Provides first aid in emergency situations.

Maintains accounting and reporting medical documentation.

Bears personal responsibility for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and those subordinate to him.

Complies with medical ethics, internal labor regulations, fire safety, occupational safety and health, sanitary and epidemiological regulations.

#### 35. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Public Procurement", the Law of the Republic of Kazakhstan "On Counteraction Corruption", Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan", Criminal Code of the Republic of Kazakhstan, Criminal Procedure the Code of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in Register of state registration of regulatory legal acts under № 26867);

general principles and basic methods of clinical, instrumental and laboratory diagnostics; procedures and standards for occupational safety and health, industrial sanitation and fire safety.

## 36. Qualification requirements.

higher education in the field of training "Healthcare" and postgraduate medical education in the specialty "Forensic Medical Examination",

or higher education in the areas of training "Natural Sciences, Mathematics and Statistics" (biological sciences, physical and chemical sciences, environment) and a certificate of advanced training in the relevant specialty.

#### Paragraph 6. Doctor - transplant coordinator

## 37. Job responsibilities:

Of a Republican doctor-transplant coordinator:

Monitors the activities and ensures effective interaction of regional and stationary transplant coordinators, for the proper maintenance and updating of data in the register of donors, recipients of tissue (parts of tissue) and (or) organs (parts of organs) of the medical information system for recording donors and recipients in supervised regions and presentation daily reporting information on the availability of potential donors in hospitals.

Bears personal responsibility for the material and technical resources entrusted to him, as well as responsibility for their safety and intended use, for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and those subordinate to him.

Makes proposals for improving regulatory legal acts and developing a transplant coordination service, organizing databases of donors, recipients and persons awaiting transplantation (waiting list), taking into account international experience.

If a posthumous donor is identified, he (she) organizes and accompanies the donor process from a donor to a recipient. Submits quarterly reports to the head of the Department for coordination of transplantation and allocation of donor organs.

Conducts information and explanatory work to promote organ donation among medical workers and the population.

Participates in the development of diagnostic and treatment protocols, methodological manuals, standards and documents in the field of transplantology, in publications, dissemination of scientific works and information materials on transplantology problems in printed and electronic publications of the supervised regions.

Ensures the safety of official documentation and the protection of confidential information that has become known during the performance of its functions.

Maintains labor and performance discipline.

of a Regional doctor - transplant coordinator:

Coordinates and ensures effective interaction of the activities of inpatient transplant coordinators in the region, maintains and updates data in the register of donors, tissue recipients (parts of tissue) and (or) organs (parts of organs) of the medical information system for recording donors and recipients and submits a daily report on the availability in region hospitals of potential donors and a quarterly report by email to the republican transplant coordinator in compliance with information security requirements.

Conducts information and explanatory work on the issues of promoting organ donation among medical workers and the population of the region on an ongoing basis.

Makes proposals to improve regulations on the main activities of the Center, participates in the development of diagnostic and treatment protocols, methodological manuals, standards and documents in the field of transplantology.

Interacts with organizations and institutions on the issues within its competence. When a potential donor is identified, takes an active part in actualization activities of a donor and organizes post-mortem organ retrieval.

Ensures the safety of official documentation and the protection of confidential information that has become known during the performance of functions.

Maintains labor and performance discipline.

Conducts a statistical analysis of the region's transplant service, reviews the scientific achievements of domestic and foreign medicine in transplantology and transplant coordination.

Takes part in meetings and conferences on problematic issues of organ donation in the region and the development of transplantation.

of an Inpatient doctor - transplant coordinator:

Collects, analyzes and summarizes data on patients undergoing treatment in the intensive care unit of a medical organization.

Provides the regional transplant coordinator with daily reporting information on the availability of potential donors in the hospital, carries out information and explanatory work on the promotion of organ donation among medical workers and the population of the region on an ongoing basis, publishes articles and information materials on the problems of transplantation in printed and electronic publications of the region.

Makes proposals to improve regulations on the main activities of the Center, takes part in the development of diagnostic and treatment protocols, and methodological manuals.

Takes part in meetings and conferences on problematic issues of organ donation in the region and the development of transplantation.

Interacts with structural departments of the hospital to examine potential donors and with organizations and institutions on the issues within its competence. In case of the actualization of a potential donor, organizes the donor process, which ends with multi-organ retrieval of organs for transplantation.

Ensures the safety of official documentation and protection of confidential information that has become known during the performance of his (her) functions, and maintains labor and performance discipline.

#### 38. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Anti-Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867).

#### 39. Qualification requirements:

for carrying out medical activities (medical practice) - the presence of professional competencies: compliance with the general requirements for the qualifications of a doctor (by profile) of the first (highest) qualification category (if any) or work experience in the relevant specialty for at least 6 years, a specialist certificate for admission to clinical practice.

For the republican, regional Doctor - transplant coordinator:

higher education in the field of training: "Healthcare", a specialist certificate (in the specialty "Healthcare Management", "Anesthesiology and Reanimatology for Adults, Children", "Neurosurgery for Adults and Children", "General Surgery", "Neurology for Adults and Children", "Nephrology for Adult and Children", "Therapy"), work experience in a healthcare organization in a specialty of republican, regional significance (city of republican significance, capital) - at least 5 years.

For an inpatient Doctor - transplant coordinator:

higher education in the field of training: "Healthcare", a specialist certificate (in the specialty "Anesthesiology and Reanimatology for Adults and Children", "Neurosurgery for Adults and Children", "General surgery", "Neurology for Adults and Children", "Nephrology for Adults and Children", "Therapy"), work experience in the field of healthcare in the specialty for at least 3 years.

#### Paragraph 7. Resident doctor

## 40. Job responsibilities:

The resident doctor, when working with patients, provides emergency, primary health care, specialized medical care, and medical rehabilitation under the guidance of a clinical mentor (a specialist certified as a health care specialist in the relevant specialty).

Determines the tactics of patient management, the plan for his examination under the guidance of a clinical mentor.

Based on clinical observations and examination, medical history, data from clinical, laboratory and instrumental studies, establishes (confirms) the diagnosis under the guidance of a mentor.

Under the supervision of a clinical mentor, prescribes and monitors treatment, carries out the necessary diagnostic, therapeutic, rehabilitation and preventive procedures and measures.

Bears responsibility for the material, technical and medicinal resources entrusted to him, for their safety and intended use, for the rational prescription of medicines, for compliance with anti-corruption legislation, and for taking measures to prevent corruption on his part and those subordinate to him

Informs the patient about the possibility of choosing methods and ways of treatment, as well as the means and medical products used.

Monitors the correctness of diagnostic and therapeutic procedures, operation of instruments and equipment.

Plans own work and analyzes performance indicators of own activity. Collaborates with other specialists and services on treatment and rehabilitation issues.

Organizes and controls the work of middle and junior medical personnel subordinate to him.

Maintains accounting and reporting medical documentation.

Complies with medical ethics, internal labor regulations, fire safety, occupational safety and health, sanitary and epidemiological regulations.

Organizes and conducts health education for the population and promotes a healthy lifestyle.

#### 41. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Anti-Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867).

organization of planned work of a medical organization;

general principles and basic methods of clinical, instrumental and laboratory diagnostics; the basics of organizing medical and preventive care, emergency medical care, and drug provision for the population;

procedures and standards for occupational safety and health, labor legislation, industrial sanitation and fire safety;

basics of international and domestic classification of diseases;

issues of examination of temporary disability and medical-social examination;

basics of health insurance; population health statistics, health criteria and indicators.

## 42. Qualification requirements:

higher education in the field of training "Healthcare", a specialist certificate in the internship specialty, a diploma on completion of the internship.

## Paragraph 8. Trainee doctor

## 43. Job responsibilities:

A trainee doctor, when working with patients, provides emergency, primary health care, specialized medical care, and medical rehabilitation under the guidance of a specialist certified as a health care specialist in the relevant specialty.

Determines patient management tactics and examination plan. Based on clinical observations and examination, medical history, data from clinical, laboratory and instrumental studies, establishes (confirms) the diagnosis.

A trainee doctor, under the supervision of a specialist, prescribes and monitors treatment, carries out the necessary diagnostic, therapeutic, rehabilitation and preventive procedures and measures.

Informs the patient about the possibility of choosing methods and ways of treatment, as well as the means and medical products used.

Conducts examinations of patients. Under the supervision of a specialized specialist, makes changes to the treatment plan depending on the patient's condition and determines the need for additional examination methods.

Monitors the correctness of diagnostic and therapeutic procedures, operation of instruments and equipment.

Bears responsibility for the material and technical resources entrusted to him, medicines, for their safety and intended use, for the rational administration of medicines.

Plans own work and analyzes performance indicators of own activity.

Collaborates with other specialists and services on the issues of treatment and rehabilitation. Organizes and controls the work of middle and junior medical personnel subordinate to him. Maintains accounting and reporting medical documentation.

Complies with medical ethics, internal labor regulations, fire safety, occupational safety and health, sanitary and epidemiological regulations.

Organizes and conducts health education for the population and promotes a healthy lifestyle.

#### 44. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Anti-Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867).

organization of planned work of a medical organization;

general principles and basic methods of clinical, instrumental and laboratory diagnostics; the basics of organizing medical and preventive care, emergency medical care, and drug provision for the population;

procedures and standards for occupational safety and health, labor legislation, industrial sanitation and fire safety;

basics of international and domestic classification of diseases; issues of examination of temporary disability and medical- social examination;

basics of health insurance;

statistics of population health, criteria and indicators of healthcare.

## 45. Qualification requirements:

higher education in the field of training "Healthcare", a certificate of a specialist in the field of healthcare in the relevant specialty (when completing a certification course) or higher education in the field of training "Healthcare" (when completing an internship in the event of a break in work experience in the specialty for more than three years for admission to work in the relevant specialty).

# Paragraph 9. Healthcare manager (on the quality of medical services, on strategy and marketing of medical services, on the organization and methodology of providing medical services, personnel (HR manager)

46. Job responsibilities:

Carries out organizational activities within a certain direction (area).

By quality of medical services:

Participates in the formation of a general concept for the development of quality management in the organization, interaction with certification, standardization, licensing bodies and consulting firms on the issues related to improving the quality of medical services.

Participates in organizing measures to protect patients from poor-quality treatment.

Monitors and controls the rational consumption of medical services and the prescription of drug therapy, carries out examinations, and organizes expert activities in healthcare organizations regarding the quality of medical services.

Participates in the development of a motivation system for medical personnel, determines indicators of the quality of medical services, evaluates the level of contribution of medical personnel in improving quality.

Conducts patient's satisfaction surveys and manages patients' complaints.

Collection and systematization of information on activities in the form of indicators in the clinical and management areas, aggregation and analysis of information (indicators and incident reports), provision of reports and draft management decisions to management on the processes and effectiveness of the quality management system.

Consulting and methodological work with personnel on quality management system processes.

Drawing up a plan and program for internal audits of departments, participation in internal audits of departments of a medical organization, communicating audit results to interested parties.

Preparing the organization for national and (or) international accreditation.

On strategy and marketing of medical services:

Carries out analysis of the external and internal environment of a medical organization.

Participates in the development of a program for the effective management of an organization, ensures monitoring of indicators characterizing the increase in financial stability

and rational allocation of resources, assesses the quality of management based on the results of assessing and monitoring the process of development of the organization's activities.

Carries out an analysis of the resources of a medical organization. Analyzes and systematizes technical, economic and socio-economic indicators of the work of a medical organization, conducts a comparative analysis of its competitiveness.

Selects a strategy and determines priorities for the development of a medical organization, determines methods for achieving goals, and justifies the choice of goals.

Carries out an analysis, forecast, and motivation of the demand for medical services provided.

Provides management with draft management decisions on the strategic development of an organization and marketing of medical services.

On the organization and methodology of providing medical services:

Provides assistance in organizing the work of the team of a structural (clinical, paraclinical) unit of a healthcare organization to provide timely and high-quality medical care, ensures interaction with other departments of the organization, and makes proposals for the rational management of labor and material-technical resources.

Ensures effective management of a healthcare organization through resource saving and efficiency, control over the regulation of the flow of patients into the organization, maintenance, and presentation of accounting and reporting documentation, collection and systematization of information on the production and medical activities of a structural unit of a healthcare organization.

Carries out the development and monitoring of the implementation of various plans, programs or rules for the organization of labor, for improving treatment and diagnostic processes and procedures, for introducing new and improving existing medical and management technologies, monitoring the implementation of the established procedure for maintaining primary records, and the reliability of the received reporting data.

Ensures compliance with medical ethics, internal labor regulations, occupational safety and health, fire safety and sanitary-epidemiological rules and regulations in the organization's units.

Conducts regular analysis of the unit's activities and, on its basis, makes proposals to senior management to improve the unit's activities.

Monitors the organization's compliance with accounting methodology, established deadlines for the development and provision of operational and statistical reporting on the activities of the unit.

Organizes instructive meetings, conducts technical and methodological training for employees of the organization, and participates in conducting classes.

For personnel (HR manager (HR manager)):

Carries out the development of the HR policy of the medical organization and its effective implementation.

Carries out staffing of the medical organization with competent medical personnel.

Participates in the creation of an effective system of professional training and continuous professional development of medical workers, participates in the development and implementation of support measures, including social support, for healthcare professionals.

Carries out labor resource planning, long-term and medium-term forecasting of the need for personnel with higher and secondary medical education.

Carries out effective management of human resources of a medical organization with the introduction of modern HR technologies (HR technologies) (HR administration (HR administration), assessment of personnel performance, creation and management of a personnel reserve, management of corporate culture).

Conducts regular analysis of the department's activities and submits proposals to senior management on the issues for improving the work of the personnel management service, as well as strategic and operational management within its competence.

#### 47. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Anti-Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan"; organization of the planned work of a medical organization, the basics of internal audit, the basics of a quality management system, the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

the basics of organizing medical and preventive care, emergency medical care, and drug provision for the population;

procedures and standards for occupational safety and health, industrial sanitation and fire safety, labor legislation;

organization of activities in emergency situations; statistics, criteria and indicators characterizing the health status of the population;

management of medical service delivery processes;

informatization and statistics in healthcare;

basics of health insurance, evaluation criteria and performance indicators of healthcare.

## 48. Qualification requirements:

higher education in the field of training "Healthcare", a certificate of advanced training in the relevant specialty.

## Paragraph 10. Doctor and (or) public healthcare specialist (valeologist, epidemiologist, statistician, methodologist)\*

## 49. Job responsibilities:

Conducts calculations and assessments of demographic indicators of public health.

Evaluates the causes and risk factors for the occurrence and spread of infectious and non-infectious diseases among the population.

Develops and carries out preventive and anti-epidemic measures, current and retrospective epidemiological analysis of morbidity.

Determines the social and preventive focus on preserving and strengthening the health of the population (society).

Assesses the health and physical development of children and adolescents. Identifies the main factors influencing the health status of the population, determines priority areas for disease prevention, and organizes preventive measures among the population.

Develops and conducts health-improving activities, promotes healthy lifestyles and balanced nutrition.

Evaluates the final results of the healthcare organization's activities.

Bears personal responsibility for the material and technical resources entrusted to him, as well as responsibility for their safety and intended use, for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and those subordinate to him.

Maintains accounting and reporting medical documentation.

Complies with medical ethics, internal labor regulations, fire safety, occupational safety and health, sanitary and epidemiological regulations.

#### 50. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Anti-Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of Fire Safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

the basics of organizing medical and preventive care, emergency medical care, and drug provision for the population;

procedures and standards for occupational safety and health, industrial sanitation, and fire safety;

organization of activities in emergency situations;

statistics, criteria, and indicators characterizing the health status of the population;

theoretical foundations of social hygiene;

healthcare management systems, criteria, and indicators for assessing the health status of the population;

statistical analysis techniques and sociological research methods.

## 51. Qualification requirements:

higher education in the field of training "Healthcare", a certificate of advanced training in the relevant specialty,

for an epidemiologist, a specialist certificate in the field of healthcare in the relevant specialty.

#### \*Note:

For positions in which pathogenic biological agents of pathogenicity group I and (or) II are handled, a certificate of a certification course on the handling of pathogenic biological agents and a document on advanced training in the field of biological safety shall be required.

#### Paragraph 11. Physician (or specialist) of the sanitary-epidemiological service\*

## 52. Job responsibilities shall:

Perform state sanitary and epidemiologic supervision of objects of sanitary and epidemiologic supervision.

Conduct inspections of facilities using modern laboratory and instrumental methods of control of environmental factors and diagnosis of infectious and parasitic diseases.

Organize and conduct sanitary-epidemiological and anti-epidemic (preventive) measures, laboratory and instrumental research of objects of human environment.

Conduct laboratory studies on the isolation of pathogenic microorganisms from clinical material and material from components of the external environment (for microbiology laboratories).

Provide registration, accounting and statistical processing of data on infectious and non-infectious morbidity, participate in the planning and control of preventive vaccinations.

Apply modern methods of analyzing the sanitary and epidemiological situation, identify the main factors affecting the health of the population, determine priority areas for disease prevention.

Bear personal responsibility for the material and technical resources entrusted to him, as well as responsibility for their safety and purposeful use, for compliance with anti-corruption legislation, and taking measures to prevent manifestations of corruption on his part and subordinates.

Maintain accounting and reporting medical documentation.

Observe medical ethics, internal labor regulations, fire safety, occupational health and safety, sanitary and epidemiological regime.

#### 53. Must know:

Constitution of the Republic of Kazakhstan, Civil Code of the Republic of Kazakhstan, Labor Code of the Republic of Kazakhstan, Code of the Republic of Kazakhstan "On the health of the people and the healthcare system", Code of the Republic of Kazakhstan "On administrative offenses", Law of the Republic of Kazakhstan "On countering corruption",

Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan", Order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of states order and standard on safety and labor protection, industrial sanitation and fire safety, labor legislation;

organization of activities in emergency situations;

statistical criteria and indicators characterizing the state of public healthcare;

criteria and indicators for assessing the state of public health, sociological methods of research; microbiological, parasitological, sanitary-chemical, toxicological, radiological methods of research and measurements of physical factors;

scientific achievements of domestic and foreign medicine in the field of sanitary-epidemiological well-being of the population;

organization of sanitary education, hygienic education of the population and promotion of a healthy lifestyle.

## 54. Qualification requirements:

Higher education in sanitary-epidemiological profile or higher medical education and certificate of advanced training in sanitary-epidemiological profile, availability of a certificate of a specialist in the field of health care in the specialty of sanitary-epidemiological welfare.

\*Note:

For positions that involve handling pathogenic biological agents of group I and (or) II of pathogenicity, the availability of a certificate of certification course on handling pathogenic biological agents and a document on advanced training in the field of biological safety.

#### Paragraph 12.

Nurse (brother) senior (senior) medical (medical) (senior paramedic, senior obstetrician)

#### 55. Job duties:

Organize the provision of the department with drugs, medical devices and medical equipment, the work of nursing and junior medical staff and monitors the performance of their duties.

Ensure the safety of property and medical equipment of the department.

Organize timely repair of medical devices and medical equipment, meals for patients in the department.

Control, accounting and storage of potent poisonous, narcotic, psychotropic medicines and precursors.

Compliance with the rules of asepsis and antisepsis by the staff of the department. Control timely and accurate fulfillment of doctor's appointments by nursing staff, sanitary treatment of incoming patients.

Organize staffing for medical examination and patronage of pregnant women and maternity patients when working in this specialty.

Organize medical examination and patronization of pregnant women and maternity patients.

Support the professional development of nursing staff.

Control the expenditure of drugs in the department, provide accounting, storage, use of drugs.

Provide therapeutic, sanitary and preventive, pre-hospital medical care, including to pregnant women and newborns, assist the doctor in surgical manipulations, take physiological labor, provide first aid in emergency conditions.

Conduct laboratory tests, sanitary and educational work among the population, including hygienic training and education, promotion of healthy lifestyles.

Carry out current sanitary supervision, organize and conduct anti-epidemic measures.

Maintain accounting and reporting medical documentation.

Observe medical ethics, internal labor order, fire safety, occupational safety and healthcare, sanitary and epidemiological regime.

#### 56. Must know:

Code of the Republic of Kazakhstan "On the health of the people and the health care system", Code of the Republic of Kazakhstan "On administrative offences", the Law of the Republic of Kazakhstan "On counteracting corruption", Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan", Order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022, № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labor legislation; issues of organization of nursing activities;

procedures and standards on safety and labor protection, industrial sanitation and fire safety.

## 57. Requirements for qualification:

higher medical (in specialty "Nursing", "Medicine", "Pediatrics", bachelor's degree in specialty "General medicine") education without requirements for work experience or post-secondary (applied bachelor's degree in specialty "Nursing") or technical and professional medical education in the profile and work experience in the specialty for at least 5 years, advanced training courses in management activities in the profile, certificate of a specialist in the field of health care in the specialty.

## Paragraph 13. Auditor of the sanitary-epidemiological service

## 58. Job responsibilities:

Analyze and evaluate the external and internal environment of the audited organization.

Identify sanitary and epidemiological risks and provide recommendations on bringing epidemically significant facilities into compliance with the requirements of legal acts.

Ensure comprehensive, objective, high-quality audit. Maintain accounting and reporting documentation at the audited facilities.

#### 59. Must know:

Constitution of the Republic of Kazakhstan, Civil Code of the Republic of Kazakhstan, Labor Code of the Republic of Kazakhstan, Code of the Republic of Kazakhstan "On the health of the people and health care system"; the Laws of the Republic of Kazakhstan "On permits and notifications"; legislation in the field of sanitary and epidemiological welfare of the population, in the field of technical regulation, in the field of food safety; in the field of biological safety, Order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of the statistics, criteria and indicators characterizing the state of public healthcare;

organization of sanitary education, hygienic education of the population and promotion of a healthy lifestyle, factors of the human environment;

theoretical foundations of social hygiene.

## 60. Qualification requirements:

higher medical education, higher education of sanitary-epidemiologic profile; additional specialized training;

certificate of a specialist in the field of health care in the relevant specialty; not less than ten years of work experience in the relevant specialty.

#### Paragraph 14. Biosafety specialist in a sanitary and epidemiological service organization\*

## 61. Job responsibilities:

Organize work to monitor employees' compliance with safe working conditions in the field of biological safety, develop measures to ensure safe conditions for the life and health of employees, the public and the environment.

Provide specialized assistance in the field of biological safety and biosecurity in the daily period, as well as during emergencies.

Instruct and train personnel in biosafety and biosecurity, determine the need for their training in other organizations.

Identify, develop, implement a risk register for medical laboratories, improve and promote biosafety requirements.

Participate in investigating causes of accidents/incidents and incidents, develop preventive and corrective measures for bio risks, monitor morbidity among the organization's employees, in case of registering work-related morbidity, organize the work of internal work investigation committee.

Supervise activities on handling pathogens in medical laboratories.

Organize and ensure biosafety in the commissioning and operation of equipment, provide advice in the preparation of technical specification of equipment in the context of biosafety, control the execution of proper methods and procedures of microbiological work.

#### 62. Must know:

Constitution of the Republic of Kazakhstan, Labor Code of the Republic of Kazakhstan, Code of the Republic of Kazakhstan "On the health of the people and health care system", the Laws of the Republic of Kazakhstan "On biological safety", "On combating corruption", "On languages in the Republic of Kazakhstan", legislative and other regulative legal acts of the Republic of Kazakhstan related to their activities, rules of occupational healthcare and safety, rules of industrial sanitation and fire safety, the order of the Minister of Emergency Situations of the Republic of Kazakhstan, and other Laws of the Republic of Kazakhstan

basics of risk management, actions in case of occurrence of dangerous events, as a result of accidental release, unintentional impact, threat, theft, misuse, leakage, unauthorized access or deliberate unauthorized release of biomaterials;

general principles of laboratory research, as well as principles related to the safety of laboratory professionals and the environment;

general principles for the design, construction, renovation and maintenance of biomaterials handling facilities;

## 63. Qualification requirements:

Higher education in the direction of training "Health care"; completion of a certification course in the relevant specialty.

\*Note:

For positions involving handling of pathogenic biological agents of group I and (or) II of pathogenicity, a certificate of certification course on handling of pathogenic biological agents and a document on advanced training in the field of biological safety.

## Paragraph 15. Specialist in receiving and sampling\*

## 64. Job responsibilities:

Perform the processes of receiving, recording, collecting, delivering and distributing samples to laboratories (procedures for handling samples potentially containing pathogens), and issuing test results.

Conduct screening and acceptance of biomaterials from the public.

Conduct sample identification and verification of sample quality, weight or quantity compliance for testing.

Perform quality and timely completion of department documentation.

Ensure safety and compliance with the order and conditions of storage of samples received for testing.

Maintain documentation and records.

#### 65. Must know:

Constitution of the Republic of Kazakhstan, Labor Code of the Republic of Kazakhstan, Code of the Republic of Kazakhstan "On the health of the people and health care system", the Laws of the Republic of Kazakhstan "On countering corruption" and "On languages in the

Republic of Kazakhstan", Order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

procedures and standards on occupational health and safety, industrial sanitation and fire safety;

regulative documents on sanitary and epidemiologic expertise;

general principles of laboratory research, modern methods of laboratory diagnostics.

66. Qualification requirements:

Higher education in the direction of training "Health care", certificate of a specialist in the field of health care in the relevant specialty, certificate of a specialist in the field of health care in the relevant specialty.

\*Note:

For positions that involve handling pathogenic biological agents of group I and (or) II of pathogenicity, a certificate of certification course on handling pathogenic biological agents and a document on advanced training in the field of biological safety.

## Paragraph 16. VAD Coordinator (VAD) (mechanical circulatory support specialist)

## 67. Job responsibilities:

Evaluate and educate the patient and family before and after implantation and after discharge.

Coordinate inpatient care including intraoperative management of the device and participate in postoperative preparation for discharge.

Coordinate long-term management and follow-up care of outpatients after VAD (VAD) implantation.

Participate in the selection of patients with severe heart failure for surgical treatment.

Participate in the development, review and modification of all program policies, protocols , procedures, guidelines and research projects.

Oversee the utilization of VAD (VAD) resources within the program budget.

#### 68. Must know:

Constitution of the Republic of Kazakhstan, Civil Code of the Republic of Kazakhstan, Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and health care system", the Code of the Republic of Kazakhstan "On administrative offenses", the Law of the Republic of Kazakhstan "On countering corruption", the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan", the Order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of States

legal and regulatory acts and documents, methodology in the field of medicine and VAD (VAD);

procedures and standards on occupational health and safety, industrial sanitation and fire safety.

#### 69. Qualification requirements:

Higher education in the direction of training "Health care", certificate of completion of certification course (retraining) in the specialty "Health care management" ("public health") and (or) certificate of qualification in the relevant specialty, certificate in VAD (VAD).

#### Chapter 4.

Qualification characteristics of positions of employees with higher and postgraduate pharmaceutical education Paragraph 1: Pharmacist (provisor)

## 70. Job responsibilities:

Organize and carry out wholesale and retail sale of medicines and medical devices to medical organizations according to requirements, to the population according to doctors' prescriptions, over-the-counter sale of finished medicines and medical devices.

personally, to be responsible for material and technical and medicinal resources entrusted to him, as well as responsible for their safety and purposeful use, for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and on the part of his subordinates.

Inform the population about the procedure and methods of use, contraindications of medicines, rules of storage at home, possible side effects, analogs of the drug within the same international name, interactions of medicines with food and other groups of medicines.

Determine the need for medicines and medical devices to maintain the required stock and assortment of medicines in order to ensure uninterrupted supply of pharmaceutical products to the population of the Republic of Kazakhstan.

Decorate showcases of trade halls of pharmaceutical organizations.

Receives medicines and medical devices at their wholesale and retail realization.

Exercise control over the technological process of creation of medicines manufactured in pharmacy conditions, quality of medicines and medical devices at the stages of reception, storage and realization.

Maintain subject-quantitative accounting of medicinal products. Withdraw from circulation medicinal products and medical devices that have fallen into disrepair, expired, falsified, counterfeit and substandard products.

Organize and implement storage conditions for medicines and medical devices in the structural subdivisions of pharmaceutical market entities.

Sort incoming drugs and medical devices and determine storage locations taking into account their physical and chemical properties.

Create conditions and storage regime for special groups of medicines and medical devices

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Withdraw expired medicinal products and medical devices, which shall be doubtful upon visual inspection or shall have become unusable due to storage, falsified and counterfeit products.

#### 71. Must know:

the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the healthcare system", the Code of the Republic of Kazakhstan "On administrative offenses", the Law of the Republic of Kazakhstan "On counteracting corruption", the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan", the joint order of the Minister of Healthcare of the Republic of Kazakhstan dated November 15, 2018 № RK MH-32 and the Minister of National Economy of the Republic of Kazakhstan dated November 15, 2018 № 70

assortment of medicines and medical devices by pharmacological groups, their characteristics, medical indications and methods of use, contraindications, side effects, synonyms and analogues of medicines, procedure of record keeping in wholesale and retail pharmaceutical organizations, merchandising of medicines and medical devices in pharmaceutical organizations;

procedure of internal labor regulations and technical operation of equipment; requirements to the quality of medicines and medical devices, labeling, packaging; methods of detecting falsified and counterfeit drugs and medical devices;

procedure for collecting information on side effects of medicines, procedure and conditions of storage of medicines and medical devices, procedure for storage and destruction of expired medicines, keeping records of expiration dates of medicines and medical devices and taking measures to prevent them;

the procedure for providing pre-hospital medical care;

modern scientific achievements of foreign and domestic medicine;

procedure and standards for labor safety and protection, industrial sanitation and fire safety;

use of information on the basis of IT-technologies (IT-technologies) in the sphere of professional activity.

72. Qualification requirements:

Higher education in the direction of training "Health care" in the specialty "Pharmacy".

## Paragraph 2. Radio pharmacist

## 73. Job Responsibilities:

Perform prepackaging and dispensing of radiopharmaceutical drugs, perform disposal of unused radiopharmaceutical drugs.

Prepare and prepack diagnostic radiopharmaceuticals.

Observe the order of operation, work with measuring instruments and equipment, monitor the proper condition of measuring equipment, prepare reagents for testing, perform the necessary preparatory and auxiliary operations for the preparation of radiopharmaceuticals.

Systematize and formalize the results of analyses and measurements, keeps records of them.

Promote safe and efficient use of radiopharmaceuticals, safely handles radioactive materials without reducing the effectiveness of the materials.

Fill all prescriptions that include drugs with radioactive components, implements measures to ensure reduction of radiation doses of drugs at workplaces.

Ensure control of compliance with sanitary and hygienic order and norms, maintains accounting and reporting documentation.

Be responsible for the quality of radiopharmaceuticals, for the material and technical, medicinal resources entrusted to him, as well as responsibility for their safety and intended use, for compliance with anti-corruption legislation and taking measures to prevent manifestations of corruption on his part and subordinate individuals.

Prepare substances and advise physicians on safety issues related to the use of radiopharmaceuticals.

#### 74. Must know:

Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan , the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system", the Code of the Republic of Kazakhstan "On administrative offenses", the Law of the Republic of Kazakhstan "On counteracting corruption", the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan, Joint Order of the Minister of Healthcare of the Republic of Kazakhstan dated November 15, 2018 № RK MH-32 and the Minister of National Economy of the Republic of Kazakhstan dated November 15, 2018 № 70

procedure of pre-hospital medical aid;

methods of chemical and physicochemical analysis;

scientific achievements and international experience in drug development;

radiation safety procedures and standards;

methods and instructions determining the procedure of development and execution of reporting documentation on the results of performed research and development;

procedure and standards for occupational safety and health, industrial sanitation and fire safety.

## 75. Qualification requirements:

Higher education in the direction of training "Health care" in the specialty "Pharmacy", certificate of completion of certification course in the specialization "Radiation pharmacy".

#### Paragraph 3.

## Process engineer for manufacture of medicinal products, medical devices \*

## 76. Job responsibilities:

Develop technological regulations and technical specifications for the production of medicinal products.

Control the release of products according to specifications, serviced equipment used in the production process.

Bear personal responsibility for the material, technical and medicinal resources entrusted to him, as well as responsibility for their safety and intended use, for compliance with anti-corruption legislation and taking measures to prevent manifestations of corruption on his part and persons subordinate to him.

Ensure the development of technology in the process of development and formulation of new drugs for production, in the conduct of technological processes in serial production.

Ensure the quality of the work performed.

Draw up production instructions for the development and implementation of measures for the disposal of production waste, neutralization and treatment of industrial effluents, emissions into the atmosphere.

Determine technical and economic standards and rates of consumption of raw materials and reagents.

Monitor compliance with the sanitary and hygienic procedure and standards, storage conditions, raw materials, semi-finished products, auxiliary materials and manufactured products.

Maintain accounting and reporting documentation.

Comply with medical ethics, internal labor regulations, fire safety, safety and labor protection, sanitary and epidemiological regime.

## 77. Must know:

the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," joint order of the Minister of Healthcare of the Republic of Kazakhstan dated November 15, 2018 № RK MH-32 and the Minister of National Economy of the Republic of Kazakhstan dated November 15, 2018 № 70 "On approval of risk assessment criteria and checklists in the areas of quality of medical services, circulation of medicines and medical devices" (registered in the Register of State Registration of Regulatory

Legal Acts under № 17744), order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

manufacturing technology of medicinal products;

nomenclature of medicinal products and medical devices;

procedure for the provision of pre-medical medical care;

procedure and standards for occupational safety and health, industrial sanitation and fire safety.

## 78. Qualification requirements:

higher education in the areas of personnel training (pharmaceutical, engineering, technological) education, certificate in a pharmaceutical specialty.

#### \* Note:

For positions within which pathogenic biological agents of pathogenicity group I and/or II shall be handled, the presence of a certificate of a certification course on handling pathogenic biological agents and a document on advanced training in the field of biological safety.

## Paragraph 4. Clinical pharmacist

## 79. Job responsibilities:

Organize work with medical professionals to provide information and advice on the rational use and use of medicines and medical devices.

Organize and manage the work of the clinical and pharmaceutical service in medical and pharmaceutical organizations, manufacturers of medicines and medical devices and their representatives.

Conduct pharmacoeconomic analysis, control in medical organizations over the conduct of pharmacotherapy.

Maintain clinical and pharmaceutical documentation.

Select drug therapy for patients, offer analog replacement.

Control issues of polyprogrammasia when using medicines, compliance with the pharmaceutical form of a medical organization.

Participate in the organization of the work of formulary commissions, the development of dosage forms of medical organizations and in the pharmacovigilance system, organize the monitoring of side effects of medicines.

Accumulate, systematize and distribute pharmaceutical and pharmacological information.

Organize and conduct work with medical professionals on issues of rational pharmacotherapy and clinical trials of medicines in medical organizations.

Conduct pharmaceutical care of the population on issues of responsible self-medication, drug provision, acquisition and use of medicines and medical devices.

#### 80. Must know:

the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," joint order of the Minister of Healthcare of the Republic of Kazakhstan dated November 15, 2018 № RK MH-32 and the Minister of National Economy of the Republic of Kazakhstan dated November 15, 2018 № 70 "On approval of risk assessment criteria and checklists in the areas of quality of medical services, circulation of medicines and medical devices" (registered in the Register of State Registration of Regulatory Legal Acts under № 17744), order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

"On approval of risk assessment criteria and checklists in the areas of quality of medical services, circulation of medicines and medical devices";

issues of rational use and use of medicines and medical devices;

issues of rational use and use of medicines and medical devices;

methods and procedure for monitoring pharmacotherapy in medical organizations;

maintenance of clinical and pharmaceutical documentation;

first aid procedure;

procedure and standards for occupational safety and health, industrial sanitation and fire safety;

modern scientific achievements of foreign and domestic medicine;

use of information based on IT-technologies (IT-technologies) in the field of professional activities.

81. Qualification requirements:

higher education in the field of training "Healthcare" in the specialty "Pharmacy."

## Paragraph 5. Manager, quality management in pharmacy

## 82. Job responsibilities:

Conduct inspections of subjects carrying out pharmaceutical activities.

Bear personal responsibility for the material and technical resources entrusted to him, as well as responsibility for their safety and targeted use, for compliance with anti-corruption legislation, and for taking measures to prevent manifestations of corruption on his part and persons subordinate to him.

Provide consulting services to subjects of the sphere of circulation of medicines on drawing up action plans aimed at preventing and eliminating identified violations.

Identify violations of pharmaceutical activities in the production, storage, transportation, acceptance and sale of medicines and medical devices.

Analyze documentation on the circulation of medicines at all stages of the life cycle: standard operating procedures, instructions, contracts, records, reports, test reports and other data recorded on paper and (or) electronic media.

Check the entity carrying out pharmaceutical activities.

\* Request and analyze information from pharmaceutical entities.

Summarize information on detected violations in order to draw up recommendations for their prevention and elimination.

Compile audit programs for a specific period of time.

Draw up an audit plan, administrative documents for the audit of the entity carrying out pharmaceutical activities.

#### 83. Must know:

the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," joint order of the Minister of Healthcare of the Republic of Kazakhstan dated November 15, 2018 № RK MH-32 and the Minister of National Economy of the Republic of Kazakhstan dated November 15, 2018 № 70 "On approval of risk assessment criteria and checklists in the areas of quality of medical services, circulation of medicines and medical devices" (registered in the Register of State Registration of Regulatory Legal Acts under № 17744), the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

organization of procedures for licensing pharmaceutical activities and activities related to the circulation of narcotic drugs, psychotropic substances and precursors;

quality control procedures;

a set of measures to maintain the quality level of medicines and medical devices during production, storage, transportation and sale throughout the shelf life;

use of information based on IT-technologies (IT-technologies) in the field of professional activities.

## 84. Qualification requirements:

higher education in the field of training "Healthcare," in the specialties "Pharmacy," "Health management."

## Paragraph 6. Inspector

## 85. Job responsibilities:

Control the activities of pharmaceutical organizations and enterprises.

Conduct an inspection to maintain the quality level of medicines and medical devices during their storage, sale and subsequent circulation during the entire shelf life, and check the subjects engaged in pharmaceutical activities.

Bear personal responsibility for the material, technical and medicinal resources entrusted to him, as well as responsibility for their safety and intended use, for compliance with anti-corruption legislation and for taking measures to prevent manifestations of corruption on his part and individuals subordinate to him.

Conduct analysis, audit and assessment of production, logistics and economic and financial activities of subjects in the sphere of circulation of medicines and medical devices.

Conduct targeted inspections of pharmaceutical and financial and economic activities, conduct inventory of inventory in pharmaceutical organizations.

Identify violations of pharmaceutical activities in the production, storage, transportation, acceptance and sale of medicines and medical devices.

Control the processes of management, planning, financial accounting and reporting in the subjects of the circulation of medicines and medical devices.

Control the maintenance of accounting, reporting operations and accounting in the subjects of the circulation of medicines and medical devices.

Summarize information on detected violations in order to draw up recommendations for their prevention and elimination.

Maintain records of drug safety information surveillance, analysis and evaluation systems. Monitor side effects of medicines.

#### 86. Must know:

the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," joint order of the Minister of Healthcare of the Republic of Kazakhstan dated November 15, 2018 № RK MH-32 and the Minister of National Economy of the Republic of Kazakhstan dated November 15, 2018 № 70 "On approval of risk assessment criteria and checklists in the areas of quality of medical services, circulation of medicines and medical devices" (registered in the Register of State Registration of Regulatory Legal Acts under № 17744), the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

procedure for pharmaceutical inspections for compliance with good pharmaceutical practices;

methods of planning, forecasting, analysis, audit and assessment of production, logistics and economic and financial activities of subjects of circulation of medicines and medical devices;

organization of pharmaceutical activities in the field of pharmacovigilance;

methods for assessing the efficacy and safety of medicinal products;

use of information based on IT-technologies (IT-technologies) in the field of professional activities.

## 87. Qualification requirements:

higher education in the direction of training "Healthcare." Conduct analysis, audit and assessment of production, logistics and economic and financial activities of subjects in the sphere of circulation of medicines and medical devices.

Conduct targeted inspections of pharmaceutical and financial and economic activities, conduct inventory of inventory in pharmaceutical organizations.

Identify violations of pharmaceutical activities in the production, storage, transportation, acceptance and sale of medicines and medical devices.

Control the processes of management, planning, financial accounting and reporting in the subjects of the circulation of medicines and medical devices.

Control the maintenance of accounting, reporting operations and accounting in the subjects of the circulation of medicines and medical devices.

Summarize information on detected violations in order to draw up recommendations for their prevention and elimination.

Maintain records of drug safety information surveillance, analysis and evaluation systems. Monitor side effects of medicines.

#### 86. Must know:

the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," joint order of the Minister of Healthcare of the Republic of Kazakhstan dated November 15, 2018 № RK MH-32 and the Minister of National Economy of the Republic of Kazakhstan dated November 15, 2018 № 70 "On approval of risk assessment criteria and checklists in the areas of quality of medical services, circulation of medicines and medical devices" (registered in the Register of State Registration of Regulatory Legal Acts under № 17744), the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

procedure for pharmaceutical inspections for compliance with good pharmaceutical practices;

methods of planning, forecasting, analysis, audit and assessment of production, logistics and economic and financial activities of subjects of circulation of medicines and medical devices;

organization of pharmaceutical activities in the field of pharmacovigilance;

methods for assessing the efficacy and safety of medicinal products;

use of information based on IT-technologies (IT-technologies) in the field of professional activities.

87. Qualification requirements:

higher education in the direction of training "Healthcare."

## Paragraph 7. Senior radiopharmaceutical

## 88. Job responsibilities:

Control the receipt of raw materials and consumables at the warehouse of the production site for the production of radiopharmaceutical drugs according to the requirements of GMP (GMP).

Keep records of consumables in the information system of a medical organization, as well as in the laboratory information system.

Maintain records of material support as well as GMP requirements.

Participate in incoming inspection of raw materials and consumables according to GMP requirements.

Provide the production site with consumables, raw materials, medical products for the production and production of radiopharmaceutical drugs.

Provide synthesis laboratories (cleanroom complex) and quality control laboratories with the necessary personal protective equipment in accordance with GMP and radiation safety requirements.

Monitor the maintenance of the sanitary condition of the production site, taking into account the requirements of GMP (GMP) and radiation safety.

Organize and control the work of junior medical personnel, and also ensure compliance with the internal labor regulations according to the requirements of GMP (GMP).

Participate in planning, development and implementation of pharmaceutical quality system documentation according to GMP requirements.

Participate in the preparation of annual requests for raw materials, medical devices, consumables, soft and hard inventory to ensure production processes.

Provide assistance to the head of the department in administrative and economic matters, according to the requirements of good manufacturing practice and radiation safety.

Monitor the process of ensuring the functioning of the pharmaceutical quality system for radiopharmaceutical drugs in accordance with the requirements of good manufacturing practice.

Provide and control the inventory process at the manufacturing site.

Ensure the necessary primary and subsequent continuous training of junior medical personnel in conditions of work with ionizing radiation at the production site.

Participate in and control the site preparation process for GMP certification.

89. Must know:

Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On combating corruption," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the order of the Minister for Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

legislative, regulatory legal acts regulating the production, economic, financial and economic activities of the organization;

GMP requirements (GMP);

principles of qualification of warehouses and auxiliary equipment;

radiation safety standards and requirements;

production facilities of the organization;

production technology of the organization's products;

procedure for drawing up and approval of plans for production and economic activities of the organization;

procedure for conclusion and execution of business and financial contracts;

basics of standardization;

fundamentals of the economy, organization of production, labor and management;

labor legislation, internal labor regulations, occupational safety and health, industrial sanitation, fire safety requirements.

90. Qualification requirement:

higher pharmaceutical education and work experience in the specialty in the production of drugs, medical devices, in the field of nuclear medicine for at least 3 years.

## Chapter 5. Qualification characteristics of positions of specialists with higher non-medical education Paragraph 1. Laboratory specialist \*

## 91. Job responsibilities:

Perform laboratory tests, tests, measurements during research and development.

Conduct laboratory studies on the isolation of pathogenic microorganisms from clinical material and material from environmental components (for microbiological laboratories).

Monitor the working condition of laboratory equipment, prepares reagents, culture media and chemical utensils for research.

Take part in the collection and processing of materials, carry out the necessary preparatory and auxiliary operations, conduct observations, take readings of instruments, processes, systematize and draw up the results of analyzes, measurements, and keep records of them.

Provide first aid.

Maintain accounting and reporting medical documentation.

Comply with medical ethics, internal labor regulations, fire safety, safety and labor protection, sanitary and epidemiological regime.

#### 92. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the healthcare system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the order of the Minister for Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

organization of activities in emergency situations;

basics of sanitary and microbiological research and internal diseases;

methods and techniques of general clinical, biochemical, hematological and cytological laboratory studies;

microbiological diagnosis of major infectious diseases;

procedure and standards for occupational safety and health, industrial sanitation and fire safety;

## 93. Qualification requirements:

higher education in the field of training "Natural Sciences, Mathematics and Statistics" (biology, biotechnology, chemistry, physics) or "Engineering and engineering" (chemical technology of inorganic substances, chemical technology of organic substances), certificate of advanced training in the relevant specialty, certificate of a health specialist in the relevant specialty (for laboratories of a sanitary and epidemiological profile).

#### \* Note:

For positions within which pathogenic biological agents of pathogenicity group I and/or II shall be handled, the presence of a certificate of a certification course on handling pathogenic biological agents and a document on advanced training in the field of biological safety.

## Paragraph 2.

Specialist in the field of sanitary and epidemiological service (biologist, zoologist or epizootologist, entomologist) \*

## 94. Job responsibilities:

Organize epizootic and zoological-parasitological survey of the territory, organize and carry out preventive measures (deratization, disinsection).

Develop targeted programs in terms of measures to combat vectors of parasitic and transmissible diseases in the surveyed territory.

Present data on the analysis of the dynamics of the epizootic process for the development of epidemiological recommendations.

Provide an expert definition of the types of the main carriers and carriers of natural focal diseases.

Take part in the identification, examination and elimination of foci of transmissible and parasitic infections.

Conduct sanitary-epidemiological, clinical and sanitary-hygienic examinations in accordance with the laboratory profile using modern technologies, measuring and analytical equipment.

Conduct laboratory studies on the isolation of pathogenic microorganisms from clinical material and material from environmental components (for microbiological laboratories).

Provide registration, accounting and statistical processing of infectious and non-infectious morbidity data.

Provide first aid for emergencies.

Conduct accounting and reporting medical documentation, sanitary and educational work among the population.

Comply with medical ethics, internal labor regulations, fire safety, safety and labor protection, sanitary and epidemiological regime.

#### 95. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the healthcare system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the order of the Minister for Emergency Situations of the Republic of Kazakhstan of February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

occupational health and fire safety procedures;

organization of activities in emergency situations;

basics, principles and methods of sanitary and epidemiological assessment, systematics and ecology of wild and synanthropic animals;

organization of laboratory service;

occupational safety and health procedure and standards.

96. Qualification requirements.

higher education in the field of training "Natural sciences, mathematics and statistics" (biology), certificate of a specialist in the field of health in the relevant specialty.

#### \* Note:

For positions within which pathogenic biological agents of pathogenicity group I and/or II shall be handled, the presence of a certificate of a certification course on handling pathogenic biological agents and a document on advanced training in the field of biological safety.

## Paragraph 3. Specialist in social work in the field of healthcare

#### 97. Job responsibilities:

Conduct general diagnostics of the social situation and individual needs for social services ; define a social service package.

Inform the population about the types of special social services.

Assist in the development of the ability to independently solve their problems, involve patients in the process of social recovery.

Maintain accounting and reporting documentation for the social service.

Coordinate work on organizing assistance to children with disabilities, lonely, elderly, individuals with disabilities, chronic patients, including care, placement in boarding schools, prosthetics, obtaining vehicles, technical means of rehabilitation, organizing psychotherapeutic work with patients, as well as with family members.

Take part in organizing work on the formation of a healthy lifestyle.

Organize work on interaction, coordination and cooperation with public organizations, government bodies and organizations, develop the volunteer movement.

Comply with medical ethics, internal labor regulations, fire safety, safety and labor protection, sanitary and epidemiological regime.

#### 98. Must know:

the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan"; the Code of the Republic of Kazakhstan "On marriage (matrimony) and family," the Law of the Republic of Kazakhstan "On social and medical-pedagogical correctional support for children with disabilities," the Law of the Republic of Kazakhstan "On the rights of the child in the Republic of Kazakhstan," the Law of the Republic of Kazakhstan "On social protection of individuals with disabilities in the Republic of Kazakhstan," Law of the Republic of Kazakhstan "On special social services," the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

legal and regulatory acts and documents, methodology for social work in the field of health;

occupational safety and health procedure and standards.

99. Qualification requirements:

higher education in the field of training "Healthcare" or "Pedagogical Sciences," certificate of completion of a certification course or certificate of advanced training in the specialty "Social Work,"

or higher education in the direction of training "Healthcare" or "Natural sciences, mathematics and statistics" (biotechnological, biological, chemical, chemical-biological, physical-mathematical), certificate of advanced training in the direction of social sphere/work

#### Paragraph 4. Quality specialist in the field of sanitary and epidemiological service

100. Job responsibilities:

Prepare accreditation materials.

Draw up, update documents and procedures of the quality management system

Maintain documentation and reports.

Participate in internal audits.

101. Must know:

resolutions, orders, other guiding and regulatory documents concerning the work of the organization, order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

rights and obligations of employees and their working hours;

internal labor regulations, occupational safety and health, industrial sanitation and hygiene, fire safety;

requirements of international standards of quality management systems implemented in the organization.

102. Qualification requirements:

higher education in the field of standardization, metrology or medical education, work experience in a similar position for at least three years.

## Paragraph 5. Quality manager for sanitary and epidemiological service

103. Job responsibilities:

Implement a quality management system and maintain compliance with the requirements of the implemented standards in the organization.

Control the systematic development and improvement of the quality management system in the organization.

Organize the preparation of materials for accreditation for compliance with the requirements of the implemented standards, as well as plans to undergo subsequent periodic inspection control upon successful completion of the accreditation procedure.

Develop the internal audit plan and program, and communicate the audit plan and program to the organization's stakeholders.

Coordinate the work of the organization's quality specialist.

Work to develop proposals and plan work to improve the quality of services.

Participate in planning and ensuring inter-laboratory comparisons, independent inter-laboratory comparisons in testing laboratories, including with international providers, and also monitor the implementation of external quality assessment.

Monitor the introduction of indicators on the mastered new research methods into the accreditation area.

Carry out consulting and methodological work with personnel on quality management system processes;

Plan to train employees of the organization in the field of quality management system.

Develop, monitor and analyze the implementation of targeted quality management programs and tasks.

Study advanced domestic and foreign experience and requirements for the implementation of quality management systems, standards and technical regulations.

Participate in test observation/study.

Organize biosafety and biosecurity activities.

Participate in training, advanced training, laboratory council, in the assessment of competence of TC employees.

Participate in internal audits.

104. Must know:

The Constitution of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Laws of the Republic of Kazakhstan "On combating corruption," "On languages in the Republic of Kazakhstan," legislative and other regulatory legal acts of the Republic of Kazakhstan, concerning its activities and the activities of the organization, order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

methodological and other guidance materials on issues related to the activities of the organization;

ISO series standards (ISO);

requirements in the field of standardization, metrology, certification, accreditation and quality management systems;

domestic and foreign experience;

building a quality management system, conducting audits, conducting claims work.

105. Qualification requirements:

higher education in the field of standardization, metrology, sanitary and epidemiological profile, or medical education, work experience in a specialty for at least three years.

## Paragraph 6.

## Biosafety specialist in the organization of the sanitary and epidemiological service \*

106. Job responsibilities:

Organize work to monitor employees' compliance with safe working conditions in the field of biological safety, develop measures to ensure safe conditions for the life and health of employees, the public and the environment.

Provide specialized biosecurity and biosecurity assistance during the day-to-day as well as emergency periods.

Instruct and train personnel on biosafety and biosecurity issues, determine the need for their training in other organizations.

Identify, develop, implement in medical laboratories a risk register, improve and promote biosafety requirements

Participate in the inventory of biological materials with pathogenic biological agents, as well as toxins, chemicals used and/or stored in laboratories.

Develop biological waste management program, advise and monitor program implementation.

Organize and ensure biosafety during the commissioning and operation of equipment, provide advice in the preparation of the technical specification of equipment in the context of biosafety, monitor the implementation of appropriate methods and procedure for microbiological work.

#### 107. Must know:

The Constitution of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system," Laws of the Republic of Kazakhstan "On biological safety of the Republic of Kazakhstan," "On combating corruption," "On languages in the Republic of Kazakhstan," legislative and other regulatory legal acts of the Republic of Kazakhstan, concerning its activities, the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

the basics of risk management, actions in the event of hazardous events, as a result of accidental release, unintended exposure, threat, theft, misuse, leakage, unauthorized access or deliberate unauthorized release of biomaterials;

general principles of laboratory research, as well as principles related to ensuring the safety of laboratory specialists and the environment;

general principles for the processes of design, construction, repair and operation of premises for work with biomaterials;

occupational safety and health, industrial sanitation and fire safety procedures.

108. Qualification requirements:

higher education in the field of training "Natural sciences, mathematics and statistics"; passing a certification course in the relevant specialty.

\* Note:

For positions within which pathogenic biological agents of pathogenicity group I and/or II are handled, the presence of a certificate of a certification course on handling pathogenic biological agents and a document on advanced training in the field of biological safety.

## Paragraph 7.

## Dosimetrist engineer in the field of sanitary and epidemiological service

109. Job responsibilities:

Conduct dosimetry analysis when selecting and allocating sites for the construction or reconstruction of enterprises, institutions, laboratories using sources of ionizing radiation.

Organize and carry out gradient works with stationary and portable dosimetry and radiometric equipment.

Study the radioactivity of environmental objects due to natural radioactivity and global nuclear fallout, provide methodological and practical assistance in conducting research, estimate the levels of radiation exposure to the population from various sources of ionizing radiation.

Monitor the implementation of restrictive and protective measures for medical X-ray exposure of the population, monitor the activities of the X-ray radiological department of the region, evaluate the genetically significant dose received by the population for medical X-ray exposure, take part in the development of recommendations for the further implementation of restrictive and protective measures.

Summarize data on radiation environment

110. Must know:

The order of the Minister for Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

basic methods for calculating the radiation doses of the human body, assessing protection against ionizing radiation;

methods of spectrometric, radiometric, dosimetry analysis;

methods of monitoring the condition of dosimetry equipment, calibration and reference;

basic labor legislation, internal labor regulations, occupational safety and health, industrial sanitation, fire safety requirements.

## 111. Qualification requirements:

higher education in the field of training "Natural sciences, mathematics and statistics" or higher engineering and technical education.

#### Paragraph 8. Engineer for sanitary and epidemiological service

## 112. Job responsibilities:

Organize work on metrological support of laboratory research: technical accounting of measuring instruments and auxiliary equipment, their technical condition and operation.

Carry out organizational and technical measures for installation, dismantling, adjustment, introduction of new equipment and measuring instruments, technical support of equipment, its repair;

Provide control over the condition and correct operation and use of equipment and measuring instruments, their safety.

Assess the state of measurements and monitor the stability of high-quality metrological measurements in laboratory units.

Organize works on material and technical support and control of measuring instruments: analysis, provision, determination and in measuring instruments and laboratory equipment;

Provide control and preservation of regulatory documents (passports, instructions, certificates) regulating the requirement for the use of measuring instruments.

Maintain deliverables.

#### 113. Must know:

The order of the Minister for Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

legislative, other regulatory legal acts, methodological and regulatory technical materials on service maintenance

internal labor regulations, occupational safety and health, industrial sanitation, fire safety requirements.

## 114. Qualification requirements:

higher engineering education and experience in engineering positions for at least 3 years.

## Paragraph 9. Medical psychologist

## 115. Job responsibilities:

Conduct psychodiagnostics examination for suspected behavioral and psychoactive disorders.

Provide assistance to clients of a medical organization in resolving and preventing conflict situations (in the family, at work, in public places).

Assist in developing a strategy for behavior in an unusual situation.

Correct psychosomatic deviations, the emotional sphere (depressive states, mood instability, neurotic reactions), eliminate fears and phobias of various origins.

Identify the causes and roles of the psychogenic factor in the patient's condition.

Evaluate the effectiveness of psychological and preventive measures according to the patient's health.

Carry out activities on psychological education of the population.

Provide advice on social issues, including age adaptation.

Carry out the prevention of child suicide.

Teach the patient self-management with chronic diseases.

Maintain accounting and reporting documentation for the psychological service.

Comply with medical ethics, internal labor regulations, fire safety, safety and labor protection, sanitary and epidemiological regime.

#### 116. Must know:

the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On people's health and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On combating corruption," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan"; the Code of the Republic of Kazakhstan "On marriage (matrimony) and family," Law of the Republic of Kazakhstan "On social and medical-pedagogical correctional support for children with disabilities," the Law of the Republic of Kazakhstan "On the rights of the child in the Republic of Kazakhstan," Law of the Republic of Kazakhstan "On social protection of individuals with disabilities in the Republic of Kazakhstan," the Law of the Republic of Kazakhstan "On special social services," the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

concepts of personality development, features of psychopathology, methods and techniques of psychodiagnostics examination, psychological correction and psychological education.

a declaration of human rights and freedoms;

medical psychology (neuropsychology, path psychology), general and differential psychology, personality psychology, age psychology, psych hygiene, psychodiagnostics, psychoprophylaxis;

fundamentals of psychological counseling and psychotherapy;

diagnostic methods and methods for correcting abnormal personality development;

modern methods of active training,

fundamentals of social and psychological communication training;

labor psychology;

medical ethics and deontology;

the psychology of professional communication.

117. Qualification requirements:

higher education in the direction of training "Healthcare" or "Pedagogical sciences," certificate of advanced training in the specialty "Psychology," "Clinical psychology."

#### Paragraph 10. Cyclotron engineer for production of radiopharmaceuticals

118. Job responsibilities:

Plan and perform work on the production of radioisotope.

Monitor cyclotron system parameters on a daily basis.

Operate the cyclotron system.

Prepare the cyclotron system for operation.

Perform calculations on the activity required for radioisotope diagnostics.

Documents radionuclide production and equipment maintenance and repair.

Develop and emit target radioactive isotopes.

Participate in keeping records of spare parts and consumables and in the formation of purchase orders.

Participate in preparation of scheduled preventive maintenance schedules.

Participate in determination of needs for new equipment for radioisotope production and preparation of equipment specifications.

Participate in acceptance tests of new equipment.

Determine the consumption rates of raw materials and materials for isotope production.

Participate in the development of the radioisotope production quality control program.

Monitor the maintenance of the cyclotron, its service and maintenance.

Participate in the collection and processing of materials, the implementation of the necessary preparatory and auxiliary operations.

Conduct observations, processing, systematization and registration of the results of analyzes, measurements, keeping records of them.

Organize and participate in preventive maintenance related to emergency situations at the cyclotron.

Maintain production documentation.

Plan the need for consumables and spare parts.

119. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the

Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," order of the Minister for Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

fundamentals of accelerator engineering and nuclear medicine;

procedure for safe operation of a cyclic accelerator of heavy charged particles (protons, ions);

skills in handling ionizing radiation sources;

methods of applied and technical calculations for selection of radiation parameters; GMP (GMP);

sanitary procedure and standards in the field of radiation safety;

procedure for occupational safety and health, fire safety, internal labor regulations.

120. Qualification requirement:

higher physical and technical education ("Nuclear physics," "Physics," "Technical physics," "Medical physics"), experience in the field of nuclear medicine, accelerator technology, production of radiopharmaceutical drugs.

### Paragraph 11. Radiochemist-technologist for the production of radiopharmaceuticals

#### 121. Job responsibilities:

Timely and qualified execute the orders of the head of the department.

Prepare equipment for the synthesis of positron radiopharmaceutical drugs and provide the synthesis with the necessary reagents.

Carry out daily decontamination of equipment and transportation of spent radioactive solutions to the appropriate storage.

Perform acceptance of radionuclides accumulated in the cyclotron target.

Perform daily synthesis of positron radiopharmaceuticals according to the work schedule.

Perform packaging for diagnostic doses of received radiopharmaceuticals and perform sampling for quality control of radiopharmaceuticals.

All cases of errors in the manufacture of radiopharmaceuticals shall be reported to the department administration, as well as identifies the causes of the errors and take measures to eliminate them.

Deliver radiopharmaceuticals from the synthesis zone to the filling medical personnel.

The design and operating principles of radiochemical synthesis plants and radiochemical equipment shall be able to apply their knowledge and experience to solve practical problems that arise during the operation of equipment.

Conduct appropriate research to obtain data for permits and certificates for work on the synthesis and implementation of radiopharmaceutical drugs in the practice of the clinic.

Participate in the development of plans and methodological programs for clinical trials.

Timely calibrate equipment for the working cycle of synthesis and packaging of radiopharmaceuticals, according to the technical documentation of manufacturers.

Participate in the acceptance test of new purchased equipment, further maintenance, and also conduct technical and hygienic care for it.

Comply with GMP (GMP), radiation safety requirements.

Develop and amend regulatory documents on the manufacturing process for the preparation of radiopharmaceutical medicinal products.

Assess any amendments introduced after implementation.

#### 122. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the healthcare system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the order of the Minister for Emergency Situations of the Republic of Kazakhstan of February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

fundamentals of chemical technology, analytical and physical chemistry, radiopharmaceuticals;

technology of radiochemical synthesis of diagnostic positron radiopharmaceuticals used in the radioisotope diagnostics department and work with open radioactive substances with activity at the workplace from 10 to 500 m Curie;

fundamentals of medicines production;

functioning of radiochemical systems such as synthesis module and packer;

GMP (GMP);

sanitary procedure and standards in the field of radiation safety;

procedure for occupational safety and health, fire safety, internal labor regulations;

procedure for drawing up protocols, forms, reports of production processes;

procedure for forming an application for consumables.

GMP (GMP).

123. Qualification requirement:

higher chemical or pharmaceutical education in the field of personnel training, experience in the production of radiopharmaceuticals, medicines, technical media

## Paragraph 12. Analytical radiochemist for quality control of radiopharmaceuticals

# 124. Job responsibilities:

Perform quality control of finished radiopharmaceuticals after each synthesis.

Perform all relevant analyses and control for chemicals and finished radiopharmaceuticals

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Carry out a complete chemical analysis of blanks, semi-finished products and manufactured radiopharmaceutical drugs in accordance with the requirements of existing orders and instructions for quality control of manufactured drugs in accordance with the requirements of pharmacopeial articles.

Send manufactured radiopharmaceuticals for bacteriological analysis in a timely manner.

Monitor the shelf life and storage conditions of chemicals.

Advise employees on storage, quality control of radiopharmaceuticals.

Maintain quality control logs for chemicals and radiopharmaceuticals manufactured in the radiochemical laboratory.

Record, process and interpret test results.

Prepare laboratory equipment, materials and facilities.

Prepare solutions for testing of medicinal products, raw materials and packaging materials , and objects of the production environment in accordance with the established procedures.

Perform the required sampling and labeling operations in accordance with established procedures.

Perform timely calibration of equipment for quality control of radiopharmaceuticals, according to manufacturers "technical documentation.

Develop and amend regulatory documents on routine quality control of works in the process of preparation of radiopharmaceuticals and draw up documents certifying their quality.

Timely and efficiently draw up protocols of the working cycle of procedures.

Maintain documentation on the use of equipment and their malfunctions.

Study the causes of deterioration in the quality of radiopharmaceuticals, the release of defects, participate in the development and implementation of measures to eliminate them.

Participate in scientific research, in the implementation of scientific and technical projects and contracts, the development and implementation of new technologies, methods for the preparation of radiopharmaceutical drugs and radioisotope studies.

Participate in validation activities.

Conduct the necessary studies in order to obtain data for obtaining permits and certificates for the synthesis and implementation of radiopharmaceutical drugs in the practice of the clinic

Participate in the development of plans and methodological programs for clinical trials.

Timely calibrate the equipment for the working cycle of the quality control laboratory, according to the technical documentation of the manufacturers.

Participate in the acceptance test of new purchased equipment, in their further maintenance, and also conduct technical and hygienic care for it.

Comply with GMP (GMP), radiation safety requirements.

Develop and amend regulatory documents on the process of quality control of radiopharmaceuticals.

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Assess any amendments introduced after implementation.

125. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the healthcare system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the order of the Minister for Emergency Situations of the Republic of Kazakhstan of February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

fundamentals of chemical technology, analytical and physical chemistry, radiopharmaceuticals;

fundamentals of medicines production;

GMP (GMP);

peculiarities of operation of control and measuring equipment required for testing the quality of radiopharmaceuticals;

procedure for drawing up protocols, forms, reports of production processes;

procedure for forming an application for consumables;

performing a sampling procedure;

validation of analytical methods;

procedure for work with precursors and poisons;

procedure for physical and chemical, analytical tests;

sanitary procedure and standards in the field of radiation safety;

procedure for occupational safety and health, fire safety, internal labor regulations.

126. Qualification requirement:

higher chemical or pharmaceutical education in the field of personnel training, experience in the field of quality control of medicines, technical media.

# Paragraph 13. Specialist radiopharmaceutical quality assurance

## 127. Job responsibilities:

Organize activities aimed at quality assurance of active pharmaceutical ingredients required for their intended use and maintenance of all quality systems in working order.

Ensure the development of standards of operational procedures, their implementation in compliance with their systematic verification.

Support and operate pharmaceutical quality system processes in the manufacture of radiopharmaceuticals.

Review final reports during production and quality control to confirm accuracy and completeness of methods, procedures, and results.

Prepare and sign the conclusion attached to the final report indicating the types of inspections, the date of their implementation.

Participate in the development of regulatory and registration documentation for the pharmaceutical quality system.

Participate in preparation for certification for compliance with the requirements of GMP (GMI), ISO 9001 (ISO 9001), JCI (GSI) standards and subsequent periodic inspection control.

Organize, plan and participate in internal audits.

Carry out validation and qualification work and risk analysis at production.

Work with corrective and preventive actions in production.

Organize and manage the pharmacovigilance system in production.

128. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the healthcare system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the order of the Minister for Emergency Situations of the Republic of Kazakhstan of February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

legal acts in the field of circulation of medicines and medical devices;

legal acts in the field of medical activity;

records management, types and forms of documentation;

principles of documentation development and management of regulatory and registration documentation;

methods and tools for risk management for the quality of medicines;

methods and tools for quality audits of pharmaceutical production, suppliers;

methodical and other materials, orders, instructions, instructions, regulatory documents regulating labor activity;

maintaining quality management systems;

internal labor regulations, occupational safety and health, industrial sanitation, fire safety requirements.

129. Qualification requirement:

higher pharmaceutical, chemical, biological, physical-technical, medical (public health) education in the field of personnel training without presenting requirements for work experience.

## Paragraph 14.

Engineer for maintenance of ventilation of facilities with open sources of ionizing radiation

130. Job responsibilities:

Perform organizational and technical measures to improve the operation of the serviced equipment, to introduce new monitoring and control systems.

Maintain operational documentation.

Perform work on storage and accounting of serviced equipment, devices, spare parts and materials, participates in the preparation of applications for them, as well as in the development of schedules for scheduled preventive maintenance of serviced equipment, in repair and commissioning of serviced equipment.

Perform organizational and technical measures to prevent environmental pollution when handling solid radioactive waste with radioactive materials.

Control compliance with the requirements of occupational safety and health rules, industrial, fire, radiation, environmental safety rules, internal labor regulations, the use of protective equipment and emergency rescue equipment, as well as the technology for performing work on the equipment serviced by employees of contracting organizations.

Take part in emergency training, civil defense activities, emergency response.

Organize technically correct operation and timely repair of ventilation of facilities with open sources of ionizing radiation.

Draw up schedules for testing and repair of ventilation of facilities with open sources of ionizing radiation.

Participate in the planning of work on the collection and analysis of dust and gas samples, organizes control measurements of the amount and speed of air movement.

Participate in the development of measures to improve the reliability of ventilation of facilities with open sources of ionizing radiation, prevent accidents, create safe and favorable working conditions during their operation.

Control the timely check of protective equipment, preventive tests and measurements of ventilation of objects with open sources of ionizing radiation.

Develop and implement, together with structural divisions, plans of organizational and technical measures to improve the efficiency of the use and saving of energy resources.

Draw up instructions for the operation and repair of equipment of the ventilation, air conditioning and automation systems.

Ensure the implementation of measures to prevent environmental pollution, cleaning and disinfection of industrial emissions.

#### 131. Must know:

the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the Law of the Republic of Kazakhstan "On energy saving and energy efficiency improvement," the order of the Minister of Emergency Situations of the

Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

legislative and regulatory legal acts regulating the production and economic activities of the enterprise, decisions of state and local authorities and management that determine priority directions for the development of the industry;

technical characteristics and design features of the equipment;

regulatory and methodological materials on equipment technical operation;

planning and organization of equipment repair works;

modern forms of equipment maintenance and repair;

equipment acceptance procedure;

GMP requirements (GMP);

The order of the Minister of Healthcare of the Republic of Kazakhstan dated December 15, 2020 № RK MH-275/2020 "On approval of the sanitary Rules" Sanitary and Epidemiological Requirements for Ensuring Radiation Safety "(registered in the Register of State Registration of Regulatory Legal Acts under № 21822);

The order of the Minister of Healthcare of the Republic of Kazakhstan dated August 2, 2022 № RK MH -71 "On approval of hygienic standards for ensuring radiation safety" (registered in the Register of State Registration of Regulatory Legal Acts under № 29012);

The order of the Minister of Healthcare of the Republic of Kazakhstan dated August 25, 2022 № RK MH -90 "On approval of the sanitary Rules "Sanitary and epidemiological requirements for radiation hazardous facilities "(Registered with the Ministry of Justice of the Republic of Kazakhstan on August 26, 2022 № 29292);

procedure of labor regulations of the enterprise, occupational safety and health, industrial sanitation, fire safety requirements.

## 132. Qualification requirement:

higher technical education, certificate of radiation safety without presentation of requirements for work experience or technical and professional, post-secondary education, work experience in the specialty in the production of radiopharmaceutical drugs or in the production of medicines, medical devices or in the field of nuclear medicine or radiation therapy for at least 3 years, certificate of radiation safety.

# Paragraph 15. Engineer for maintenance of liquid radioactive waste collection, storage and discharge systems

## 133. Job responsibilities:

Perform organizational and technical measures to improve the operation of the serviced equipment, to introduce new monitoring and control systems.

Maintain operational documentation.

Perform work on storage and accounting of serviced equipment, devices, spare parts and materials, participates in the preparation of applications for them, as well as in the

development of schedules for scheduled preventive maintenance of serviced equipment, in repair and commissioning of serviced equipment.

Perform organizational and technical measures to prevent environmental pollution when handling radioactive materials, liquid radioactive waste.

Control compliance with the requirements of occupational safety and health rules, industrial, fire, radiation, environmental safety, internal labor regulations, the use of protective equipment and emergency and rescue equipment, as well as the technology for performing work on the equipment serviced by employees of contracting organizations.

Take part in emergency training, civil defense activities, emergency response.

Organize technically correct operation and timely repair of the liquid radioactive waste collection, storage and discharge system.

Draw up schedules for testing and repair of the liquid radioactive waste collection, storage and discharge system.

Participate in the development of measures to improve the reliability of the liquid radioactive waste collection, storage and discharge system, prevent accidents, create safe and favorable working conditions during its operation.

Control timely inspection of protective equipment, preventive tests and measurements of the liquid radioactive waste collection, storage and discharge system.

Develop and implement, together with structural divisions, plans of organizational and technical measures to improve the efficiency of the use and saving of energy resources.

Ensure the implementation of measures to prevent environmental pollution, to treat and disinfect industrial emissions and wastewater.

#### 134. Must know:

the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan"; the Law of the Republic of Kazakhstan "On energy saving and energy efficiency improvement," the order of the Minister for Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

legislative and regulatory legal acts and regulatory documents regulating the production and economic activities of the enterprise, decisions of state and local authorities and management that determine priority areas for the development of the industry;

technical characteristics and design features of the equipment; regulatory and methodological materials on equipment technical operation; planning and organization of equipment repair works; modern forms of equipment maintenance and repair;

equipment acceptance procedure;

The order of the Minister of Healthcare of the Republic of Kazakhstan dated December 15, 2020 № RK MH-275/2020 "On approval of the sanitary Rules" Sanitary and Epidemiological Requirements for Ensuring Radiation Safety "(Registered with the Ministry of Justice of the Republic of Kazakhstan dated December 20, 2020 № 21822);

The order of the Minister of Healthcare of the Republic of Kazakhstan dated August 2, 2022 № RK MH -71 "On approval of hygienic standards for ensuring radiation safety" (Registered with the Ministry of Justice of the Republic of Kazakhstan dated August 3, 2022 № 29012);

The order of the Minister of Healthcare of the Republic of Kazakhstan dated August 25, 2022 № RK MH -90 "On approval of the sanitary Rules" Sanitary and Epidemiological Requirements for Radiation Hazardous Facilities "(Registered with the Ministry of Justice of the Republic of Kazakhstan on August 26, 2022 № 29292);

internal labor regulations, occupational safety and health, industrial sanitation, fire safety requirements.

#### 135. Qualification requirement:

higher technical education, a certificate on radiation safety without presenting requirements for work experience or technical and professional, after secondary education, work experience in a specialty in the production of radiopharmaceutical drugs or in the production of medicines, medical devices or in the field of nuclear medicine or radiation therapy for at least 3 years, a certificate on radiation safety.

## Paragraph 16. Engineer for radiation safety

## 136. Job responsibilities:

Monitor compliance with radiation safety requirements, creation of safe working conditions, ensuring environmental protection against radioactive contamination.

Organize technological processes in subdivisions of the organization in order to ensure radiation safety.

Monitor compliance with air measurement schedules, planned measurements of vibration, noise, illumination, dosimetry control.

Develop technical documentation on radiation safety, occupational safety and health.

Participate in the development of industry regulatory documentation on radiation safety.

Carry out advisory and methodological work on radiation safety issues with the technological services of the organization.

Participate in the review of design, engineering and other technical documentation for compliance with radiation safety requirements.

Participate in the work of commissions for the commissioning of new and reconstructed structures and equipment for the processing, storage and transportation of radiation hazardous materials.

Monitor the state of radiation safety when receiving, issuing, transferring, removing, transporting radioactive substances, materials, radioactive waste.

Monitor the effectiveness of radiation protection equipment, biological protection of buildings, structures, premises, process equipment, the serviceability of alarm systems, interlocks involved in the radiation safety system.

Take part in the work of commissions on the inspection of the state of radiation safety, investigation of violations of radiation safety, radiation incidents, cases of overexposure and excess of other radiation safety standards, investigation of cases of industrial injuries.

Monitor the condition of radiation safety equipment.

Control the use of personal protective equipment and safety devices.

Monitor the correctness of admission to work with sources of ionizing radiation and radioactive substances.

Participate in the development of action plans for the prevention of radiation accidents, monitor the readiness of the organization's subdivisions to carry out these measures.

Participate in the development, organization and implementation of preventive measures to reduce radiation exposure, monitor their implementation.

Take part in the implementation of more advanced measuring instruments and methods, new personal protective equipment.

Ensure the reliability of the submitted information on the state of radiation safety in the subdivisions of the organization.

Prepare draft orders, instructions, orders, decisions, measures on radiation safety issues.

Monitor compliance with the terms and conditions of licenses issued to subdivisions of the organization.

Provide subdivisions of the organization with rules, regulations, instructions, posters and other visual aids on radiation safety.

Control the conduct of introductory, regular and extraordinary briefings and verification of personnel knowledge in the field of radiation safety.

Participate in the organization of periodic medical examinations of personnel working in radiation hazardous areas.

Monitor the radiation background in the premises where radiation hazardous works shall be carried out and in adjacent premises in accordance with radiation safety instructions.

Daily and quarterly monitors individual doses of exposure of personnel of group "A" in accordance with the sanitary rules "Sanitary and epidemiological requirements for ensuring radiation safety."

Control accounting, storage and disposal of radioactive waste.

Monitor the level of contamination of premises, working surfaces, equipment, containers, overalls and personal protective equipment, skin, the quality of their decontamination.

Keep records of inspection and use of equipment and its faults.

Monitor the radiation and hygienic condition of radiation and protective equipment, equipment, alarm systems and interlocks.

Ensure the safety of the equipment and its maintenance.

Participate in the preparation of documentation and instructions on radiation safety.

137. Must know:

The code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On combating corruption," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

The order of the Minister of Healthcare of the Republic of Kazakhstan dated December 15, 2020 № RK MH-275/2020 "On approval of the sanitary Rules" Sanitary and epidemiological requirements for ensuring radiation safety "(registered in the Register of State Registration of Regulatory Legal Acts under № 21822);

The order of the Minister of Healthcare of the Republic of Kazakhstan dated August 2, 2022 № RK MH -71 "On approval of hygienic standards for ensuring radiation safety" (registered in the Register of State Registration of Regulatory Legal Acts under № 29012);

The order of the Minister of Healthcare of the Republic of Kazakhstan dated August 25, 2022 № RK MH -90 "On approval of the sanitary Rules" Sanitary and epidemiological requirements for radiation hazardous facilities "(registered in the Register of State Registration of Regulatory Legal Acts under № 29292);

technological regulations for nuclear and radiation safety;

methods of radiation monitoring of measurements to the extent necessary for the effective performance of its functions;

properties of ionizing radiation and methods of their registration;

types of forms and passports filled in for reporting to territorial and republican supervisory authorities;

operation with dosimetry and radiometric devices;

monitoring of radiation background in premises where radiation hazardous works are performed;

GMP (GMP);

methods of radiation monitoring of measurements;

formation of applications;

procedure for maintaining reporting documentation on ensuring radiation safety.

138. Qualification requirement:

higher physical and technical education ("Nuclear physics," "Physics," "Technical physics," "Radiation physics"), radiation safety certificate, work experience in radiation safety or

medical physics in the field of nuclear medicine or in the field of handling ionizing radiation sources for at least 3 years.

#### Paragraph 17. Medical physicist

#### 139. Job responsibilities:

Ensure compliance with the principles of operation and operating conditions of diagnostic and therapeutic equipment of nuclear medicine.

Conduct daily and periodic quality control of diagnostic and therapeutic equipment of nuclear medicine.

Conduct daily technical control of diagnostic and therapeutic equipment of nuclear medicine.

Calibrate nuclear medicine diagnostic and therapeutic equipment.

Conduct preventive maintenance of diagnostic and therapeutic equipment of nuclear medicine.

Control the repair of diagnostic and therapeutic equipment of nuclear medicine.

Determine doses from diagnostic, therapeutic and technological procedures of nuclear medicine.

Develop and approve the necessary medical, physical and technical documentation.

Participate in determining the needs for new equipment and devices.

Participate in acceptance tests of new equipment and apparatuses.

Prepare new equipment and apparatuses for clinical operation.

Supervise the maintenance of equipment and apparatus.

### 140. Must know:

The Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On combating corruption," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

methods and instructions defining the procedure for development and execution of reporting documentation based on the results of performed research and development;

organizational structure of the organization;

procedure and standards of radiation safety, occupational safety and healthcare and fire safety.

# 141. Qualification requirement:

higher physical and technical education (specialty "Nuclear physics," "Physics," "Technical physics"), certificate for radiation safety without presenting requirements for work experience.

#### Paragraph 18. Engineer for process and medical gas service in nuclear medicine

142. Job responsibilities:

Organize technically correct operation and timely repair of gas supply system equipment.

Develop long-term and current plans for various types of equipment repair in the area of process and medical gases and generator-compressor equipment.

Monitor the activities of contractors involved in the repair and testing of equipment.

Analyze the causes of increased wear, accidents and downtime of equipment, participate in the investigation of their causes.

Keep records and certification of equipment, draw up the necessary technical documentation and maintain established reports.

Draw up requests and specifications for spare parts, materials, tools, monitors the correctness of their consumption.

Take part in the organization and control of installation and adjustment of pressure vessels in the line of the process gas supply system (for cyclotron, hot chambers and equipment of the quality control laboratory), keep records of process and medical gases and generator-compressor equipment, check its technical condition, quality of repair.

Draw up instructions for the operation and repair of gas supply system equipment.

Participate in the development of measures to improve the reliability of equipment, to prevent accidents, to create safe and favorable working conditions during their operation of gas supply systems.

Monitor compliance by employees of the service with occupational safety and health rules , radiation safety, instructions and schemes for the operation of gas supply system equipment.

Draw up instructions for the operation and repair of the equipment of the gas supply system of the enterprise.

Monitor the installation of compressed air for hot chambers.

Check for leaks in the gas line.

Check the gas supply systems.

Check for troubleshooting of gas and compressed air supply to synthesis modules.

Participate in bypasses on equipment of gas supply systems at the enterprise.

143. Must know:

Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On combating corruption," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

technical characteristics and design features of the gas supply system equipment;

regulatory and methodological materials on technical operation of gas supply system equipment;

planning and organization of repair work of gas supply system equipment;

principles of proper technical operation of buildings and engineering systems in accordance with the current regulatory documentation;

procedure and standards for occupational safety and health, radiation and fire safety, industrial safety (pressure vessels).

### 144. Qualification requirement:

higher physical and technical education, radiation safety certificate, admission to maintenance of pressure vessels, work experience at work for at least 3 years.

# Paragraph 19. Engineer for heat supply, ventilation and air conditioning systems in nuclear medicine

#### 145. Job responsibilities:

Organize technically correct operation and timely repair of equipment of the heat supply and ventilation system.

Ensure the preparation and maintenance of documentation for heat supply and ventilation systems, monitor the implementation of equipment repair schedules.

Take part in organization and control of installation and adjustment of heat supply and ventilation equipment, keep records, check its technical condition, quality of repair.

Ensure the preparation of repair work, take measures to implement the allocated funds for spare parts for equipment repair.

Take part in the preparation and implementation of measures to improve heat supply and ventilation systems based on advanced domestic and foreign experience.

Participate in the planning of work on the collection and analysis of dust and gas samples, organize control measurements of the amount and speed of air movement.

Develop regulatory documents on operation, maintenance and repair of equipment, corrosion protection.

Participate in the investigation of the causes of equipment accidents, industrial injuries, in the development and implementation of measures to prevent them.

Draw up requests and specifications for spare parts, materials, tools, monitor the correctness of their consumption.

Give conclusions on rationalization proposals and inventions related to the improvement of heat supply and ventilation equipment structures, organization of repair work, maintenance, organize the implementation of accepted proposals.

Participate in the development and monitors the implementation of environmental protection measures.

Determine the need for training of subordinate personnel, evaluate the effectiveness of their training.

#### 146. Must know:

The Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan"; the Law of the Republic of Kazakhstan "On energy saving and energy efficiency improvement," the order of the Minister for Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

legislative and regulatory legal acts regulating production and economic activities, resolutions of state and local authorities and administrations that determine priority directions for the development of the industry;

technical characteristics and design features of the equipment of the heat supply and ventilation system;

regulatory and methodological materials on the technical operation of the equipment of the heat supply and ventilation system;

GMP (GMP);

internal labor regulations,

procedure and standards of radiation safety, occupational safety and health and fire safety.

147. Qualification requirement:

higher technical education in the relevant field of personnel training, a certificate on radiation safety without presenting requirements for length of service.

## Paragraph 20. Engineer for water supply and water disposal in nuclear medicine

148. Job responsibilities:

Provide technical operation of uninterrupted operation of water supply networks and structures.

Perform work on localization and elimination of damage on networks, structures and equipment.

Draw up a diagram of inclusions and deviations of networks for emergency recovery work.

Develop annual, quarterly, monthly repair plans for networks, structures, equipment on them.

Ensure timely execution of scheduled preventive maintenance approved by the preventive maintenance schedule

Draw up the necessary documentation for capital and current repairs of fixed assets and exercise control over the write-off of materials.

Draw up requisitions and specifications for materials, tools, spare parts for equipment, monitors the correctness of their use.

Participate in checking the technical condition of water supply networks, structures, the quality of repair work.

Analyze the causes of accidents and damage at water supply and sewerage facilities, develop measures to prevent them.

Perform accounting and certification of water supply and sewerage facilities, introduce amendments to the documentation after their repair.

Monitor compliance with occupational safety and health, fire and radiation safety rules and regulations.

Participate in the investigation of the causes of injuries and the development of measures to prevent it.

Monitor the timely certification of employees serving high-risk facilities.

Maintain relevant asset inventory documentation.

Monitor the correct operation of group metering devices.

149. Must know:

The Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Labor Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On the health of the people and the healthcare system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the order of the Minister for Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

directive and administrative documents, methodological and regulatory materials on the work performed;

prospects of technical development and peculiarities of activity of the enterprise ( subdivisions of the enterprise);

structure of water supply and sewerage facilities;

water supply and sewerage schemes, well locations, pump station operation areas;

procedure for technical operation of water supply and sewerage systems in populated areas;

occupational safety and health procedures for operation of water supply and sewerage systems in populated areas;

the procedure for using public water supply and sewerage;

sanitary standards and rules and standards for external water supply and sewerage networks, requirements for the quality of drinking water and purification of domestic risers;

operating principles, technical characteristics, design features of developed and used technical means, materials and their properties.

150. Qualification requirement:

higher technical education in the relevant field of personnel training, a certificate on radiation safety without presenting requirements for length of service.

#### Paragraph 21. Engineer for instrumentation and automation in nuclear

#### 151. Job responsibilities:

Organize repair and maintenance of instrumentation and automation equipment.

At existing facilities, enterprises and laboratories shall be studying new types and means of instrumentation and automation.

Provide trouble-free operation of instrumentation and automation equipment serviced by the site at the enterprise facilities.

Ensure rational use of materials, spare parts, equipment and other resources by site employees.

Monitor the safety and serviceability of equipment, tools, materials, household and fire equipment, personal protective equipment.

Provide high quality of work performed.

Monitor compliance with the repair technology.

Monitor the correct operation of the equipment and communications of the site in accordance with the established procedure.

Develop instructions on the use and maintenance of instrumentation and automation for the personnel of the enterprise subdivisions.

Determine the scope of repair work, draw up schedules for preventive maintenance and technical documentation.

Analyze the causes of malfunctions and malfunctions in the operation of instrumentation and automation.

Provide improved measurement quality and equipment reliability.

Draw up the current work plan (name of the site, workshop, department).

152. Must know:

The Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On combating corruption," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan," the order of the Minister of Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of state registration of regulatory legal acts under № 26867);

fundamentals of the constitution of the Republic of Kazakhstan, civil and labor legislation

methodological, regulatory, guidance materials related to production and economic activities (site, workshop, department);

equipment and communications (site, shop, department), procedure for its operation and repair, design features;

procedure for acceptance of equipment for repair and its delivery after repair;

organization and technology of repair works;

procedure for scheduled preventive maintenance;

procedure for drawing up punch lists and requests for equipment, materials, spare parts, tools;

regulations, procedure and instructions on industrial safety and environmental protection, industrial sanitation;

procedure for arrangement and operation of electrical installations;

fundamentals of the economy, organization of production, labor and management;

internal labor regulations, occupational safety and health, industrial sanitation, fire safety requirements.

#### 153. Qualification requirements:

higher technical education in the relevant field of personnel training, a certificate on radiation safety without presenting requirements for length of service.

## Paragraph 22. Process engineer in Nuclear Medicine

## 154. Job responsibilities:

Support the technical policy and directions of technical development of engineering systems, operation of life support systems of the building of nuclear medicine, ways of reconstruction and technical re-equipment for the future.

Organize technically correct operation and timely repair of production equipment, quality control and packaging of radiopharmaceutical drugs in compliance with radiation safety requirements with ionizing radiation sources.

Prepare schedules for testing and repair of cyclotron equipment, synthesis laboratory equipment, hot cabinets in accordance with GMP requirements.

Participate in the development of measures to improve the reliability of production equipment, quality control and packaging of radiopharmaceutical drugs, prevent accidents, create safe and favorable working conditions during their operation in the radiation zone.

Control timely inspection of protective equipment, preventive tests and measurements of cyclotron equipment, synthesis laboratory equipment in accordance with GMP requirements.

Develop and implement, together with structural units, plans of organizational and technical measures to improve the efficiency of use and save energy resources of the building of the nuclear medicine center.

Fulfill information security requirements in accordance with information security policy and technical documentation.

Use the relevant ISO documentation, documentation and JCI requirements necessary for the operation of engineering and technical services and comply with its requirements.

Use GEP, comply with GMP.

Request and accept information on the state of operability of production equipment, quality control and packaging of radiopharmaceuticals, analyzes and, if necessary, take measures to eliminate the identified shortcomings within the established time frame.

Plan applications for the purchase of spare parts and consumables, organize their receipt (acquisition), accounting and storage in compliance with radiation safety requirements.

React and take measures in case of failure of pneumatics, blocking of moving parts and mechanisms of production equipment, quality control and packaging of radiopharmaceutical drugs with high ionizing radiation.

Check the correct operation of drives, operability of mechanisms and equipment in the radiation zone.

Monitor the condition of the pre-vacuum pumps, emergency water pumps in the cyclotron and the synthesis laboratory at high ionizing radiation.

#### 155. Must know:

The Code of the Republic of Kazakhstan "On the health of the people and the health care system," the Code of the Republic of Kazakhstan "On administrative offenses," the Law of the Republic of Kazakhstan "On languages in the Republic of Kazakhstan"; the Law of the Republic of Kazakhstan "On energy saving and energy efficiency improvement," the order of the Minister for Emergency Situations of the Republic of Kazakhstan dated February 21, 2022 № 55 "On approval of fire safety Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 26867);

fundamentals of the constitution of the Republic of Kazakhstan, civil and labor legislation

energy policy, goals and objectives of the enterprise in the field of energy saving and energy efficiency improvement and participate in their implementation within the limits of their functions;

technical characteristics and design features of the equipment;

regulatory and methodological materials on equipment technical operation;

modern forms of equipment maintenance and repair;

equipment acceptance procedure;

rules of labor regulations of the enterprise;

rules and regulations on occupational safety and health, radiation and fire safety.

156. Qualification requirement:

higher technical education in the relevant field of personnel training, a certificate on radiation safety without presenting requirements for length of service.

## Paragraph 23. Medical engineer physicist

## 157. Job responsibilities:

Plans and takes part in the implementation of the radiotherapy programme jointly with the radiation therapist by calculating dose distributions and exposure times, evaluating and optimising plans.

Draws up and takes part in the implementation of a quality control programme for radiotherapy equipment.

Monitors radiation beam characteristics, including beam calibration and preparation of new device for clinical use, at intervals as required by radiation therapy quality assurance requirements.

Processes dosimetric data and inputs it into computerised planning systems.

Verifies radiation plans with the aid of phantom measurements, when performing complex radiation therapy techniques.

Takes part in pre-radiation preparation (CT-simulation) and co-ordinates the treatment plan jointly with the radiologist.

Takes part in the first stacking of the patient jointly with the radiation oncologist and the radiation oncology nurse and performs periodic monitoring of the proper implementation of the radiation treatment plan.

Arranges and performs measures to ensure radiation safety of the patient, including collective and individual radiation protection equipment, dosimetric control of examinations.

Takes part in determining the needs for new equipment for radiotherapy and preparation of specifications.

Takes part in acceptance testing of new equipment.

Prepares new devices for clinical use.

Incorporates irradiation plans into the patient's radiological record, showing passport data, signature of the designer and the person who verified and approved the plan.

The second medical engineer physicist or the head of the department verifies the irradiation plans.

Researches and implements advanced developments in radiation therapy physics, develops quality control programmes.

Monitors the maintenance of radiation therapy equipment.

158. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", the order of the Minister of Emergency Situations of the Republic of Kazakhstan №55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under №26867);

fundamentals of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

methods and instructions governing the order of development and execution of reporting documentation on the results of the performed research and development;

organisational structure of the entity;

procedure and norms of radiation safety, occupational health and safety and fire safety.

159. Qualification requirements:

Higher education in physics and engineering (majoring in medical physics, physics, technical physics), certificate in radiation safety without any requirements for work experience.

#### Paragraph 24. Radiation equipment maintenance engineer

160. Job responsibilities:

Performs daily external inspection of the radiation equipment and ancillary machinery.

Turns on the radiation equipment at the commencement of the work with tests as per technical requirements and quality control programme, turns off the radiation equipment at the end of the work.

Runs quality control procedures on the radiation equipment in line with the approved regulations, adjustments, preventive maintenance, routine repairs of the radiation equipment as per the technical requirements for the equipment.

Takes part in the acceptance of new equipment.

Maintains reporting documentation (equipment maintenance logs, quality control protocols).

Supervises the maintenance of radiation therapy equipment.

161. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

fundamentals of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

methods and instructions governing the procedure of development and execution of reporting documentation on the results of the work performed;

organisational structure of the entity;

procedure and norms of radiation safety, occupational health and safety and fire safety.

162. Qualification requirements:

higher technical education, radiation safety certificate in radiation safety without requirements for work experience.

#### Paragraph 25. Clinical embryologist

163. Job responsibilities:

Undertakes the embryological part of assisted reproductive technology programmes.

Jointly with the physician conducts work with gamete donors.

Takes part in mastering and introducing new efficient methods of cell selection and fertilisation, embryo culturing, ensures the use of methods with proven efficacy and safety.

He/she is involved in analysing the results of aided reproductive technology, participates in internal laboratory and external quality control.

Freezes and thaws sperm, oocytes, embryos and reproductive tissues, secures the necessary storage regime for biomaterials, keeps records of the material.

Monitors the condition of the equipment and replenishment of the stock of culture media and consumables used at the embryological stage of assisted reproductive technology programmes.

Performs the embryological part of pre-implantation genetic testing methods.

164. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

fundamentals of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

laws and other normative legal acts of the Republic of Kazakhstan in the sphere of public health, organisation of laboratory service, legal and ethical issues of auxiliary reproductive technology;

basic methods of assisted reproductive technology, modern directions of development of reproductive medicine, procedure and methods of obtaining biological material, methods of embryological and clinical studies;

modern techniques of cryobiology, basics of freezing, thawing and storage of biomaterial in embryological laboratories of assisted reproductive technology centres;

the procedure of safety and labour protection and fire safety in working in laboratories (units) of assisted reproductive technology and the procedure of use and disposal of biomaterials, culture media and consumables in the embryological laboratory (unit);

techniques of embryological research and the procedure of embryological work quality control;

procedure for donation of sperm, oocytes and embryos, requirements for working with donor material;

procedure of operation of medical equipment and office equipment;

165. Qualification requirements:

higher education majoring in Healthcare or Natural Sciences, Mathematics and Statistics (biological, chemical, chemical-biological, physical-mathematical), technical sciences and technologies (biotechnology, bioengineering);

a certificate of advanced training in the relevant specialty.

# Chapter 6. Qualification specifications for positions of employees with post-secondary medical education Paragraph 1. Extended practice hospital (medical) nurse (brother)

166. Job responsibilities:

Conducts nursing examination.

Makes a nursing diagnosis.

Creates a nursing intervention plan for the patient.

Monitors the implementation of nursing activities by nurses with technical and vocational education.

Evaluates the effectiveness of the prescribed plan of nursing interventions in general practice, internal medicine, surgery, obstetrics and gynecology, psychiatry, geriatrics, rehabilitation, palliative care and specialized areas of health care at the primary health care and hospital levels

Provides individual consultations to patients with the most common non-communicable diseases and acute respiratory viral infections within the scope of their competence.

Organizes, monitors effectiveness, and supervises patient and family member education on general care procedures and disease management.

Provides patronage to pregnant women, women after childbirth, children under one year of age, patients in dispensaries, and the elderly.

Organizes activities to promote health and prevent diseases, ensures proper implementation of medical prescriptions by nurses, monitors the implementation of preventive measures by nurses with technical and vocational education, evaluates the effectiveness and efficiency of measures

Ensures the accounting and storage of medicines, blood products, and blood substitutes, and the maintenance of nursing records in a medical and preventive institution.

Provides first aid to citizens, including in extreme conditions, pre-hospital and palliative medical care.

Provides oversight for the organization of a safe hospital environment and infection control.

Complies with medical ethics, internal work regulations on fire safety, occupational health and safety, and sanitary and epidemiological regulations.

Participates in organizing interprofessional work between nurses, doctors, and other "health care workers".

Organizes the proper implementation of medical orders by nurses.

Participates in the development of evidence-based nursing guidelines and protocols.

Participates in the development of organizational policies and quality improvement activities in nursing.

Controls the organization of nursing documentation in an e-health environment.

Footnote. Paragraph 166 is in the wording of the Order № 66 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated 16 July 2025 (shall enter into force upon expiry of ten calendar days after the date of its first official publication).

167. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

fundamentals of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

issues of organising nursing activities;

organisation of activities in emergency situations;

procedures and norms on safety and labour protection, industrial sanitation and fire safety.

168. Qualification requirements:

post-secondary education majoring in Nursing (applied bachelor's degree), with no requirements for work experience, availability of a certificate of Extended practice hospital (medical) nurse (brother).

# Chapter 7.

Qualification specifications of posts of workers with technical and vocational medical education, education of sanitary-epidemiological profile Paragraph 1: Feldsher

169. Job responsibilities:

Renders therapeutic and prophylactic and sanitary-preventive, emergency medical aid in case of acute diseases and accidents.

Maintains personal records of the population of the area, plans its activities in the area.

Performs outpatient appointments and serves patients at home.

Diagnoses, treats and prevents diseases.

Performs pre-hospital care, prepares patients for examination and consultations with doctors, aides the doctor in surgical manipulations, takes physiological deliveries.

Exercises current sanitary supervision, organises and implements anti-epidemic measures, conducts sanitary and educational work among the population.

Undertakes sampling and chemical macro- and microscopic examination of biological material of blood, gastric contents, cerebrospinal fluid, effusion fluids, examination of secretions, helminth-ovoscopic examination.

Maintains laboratory equipment in good working order.

Maintains accounting and reporting medical documentation.

Observes medical ethics, internal labour regulations, fire safety, occupational health and safety, sanitary and epidemiological regime.

170. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

fundamentals of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

procedure for disinfection of waste material;

basics of the expertise of incapacity for work;

basics of sanitary and anti-epidemic regime;

issues of organisation of nursing activities;

procedures and norms for labour safety and protection, industrial sanitation and fire safety

## 171. Qualification requirements:

Technical and vocational medical education majoring in "General Medicine" or "Midwifery", advanced training majoring in "General Medicine" and (or) "Laboratory Diagnostics" or "Laboratory Feldsher" or "Hygiene Sanitation and Epidemiology" or "Sanitary Paramedic" or "Dentistry" or "Dentist" or "Nursing Care".

For persons who assumed this position prior to January 1, 2005 retraining majoring in "General Medicine", certificate of specialist in healthcare or higher medical education majoring in "General Medicine", "Paediatrics", bachelor's degree in "General Medicine" and advanced training in "General Medicine", certificate of specialist with technical and vocational, post-secondary medical education.

## Paragraph 2: Obstetrician (midwife)

## 172. Job responsibilities:

Maintains outpatient appointments, completes and completes medical documentation.

Examines, establishes the terms of pregnancy, identifies pregnant women, differentiates them by risk group. Performs medical check-ups and home visits for pregnant women and maternity patients, preventive examinations of women and sanitary and educational work to protect the health of women and children.

Renders pre-hospital medical care to pregnant women and gynaecological patients; emergency obstetric and gynaecological care and emergency pre-hospital care for newborns.

Delivering babies, treating newborns. Observes the health and development of children in the first year of life.

Provides support for minor obstetric and gynaecological surgeries. Performs work on the protection of women's reproductive health, prevention of breastfeeding. Estimates the severity of the condition in the pathological course of labour and postpartum period.

Performs medical manipulations. Renders emergency medical aid in acute illnesses and accidents.

Performs urine analysis for protein, determination of blood group, Rh factor, haemoglobin, erythrocyte sedimentation rate, prophylactic and health education work to promote a healthy lifestyle, and gives advice on family planning.

Maintains dispensary monitoring of women with intrauterine contraceptives.

Maintains accounting and reporting medical documentation.

Observes health ethics, internal labour regulations, fire safety, occupational health and safety, sanitary and epidemiological regime.

173. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

issues of arranging the organisation of nursing activities;

the course of labour and its variants, management of pregnancy in case of complications; aseptic and antiseptic procedures;

sanitary and anti-epidemic regime of obstetric institutions;

basic principles of maternal and child health protection;

procedures and norms for labour safety and protection, industrial sanitation and fire safety

## 174. Qualification requirements:

Technical and vocational medical education majoring in "Midwifery" or majoring in "General Medicine" and a certificate of advanced training in "Midwifery", a certificate of a healthcare specialist in "Midwifery"; or higher medical education majoring in "Medicine", "

Paediatrics" or a bachelor's degree in "General Medicine", advanced training in "Midwifery" and a certificate of a specialist in "Midwifery".

#### Paragraph 3: District nurse (medical brother) and/or general practice nurse (medical brother)

175. Job responsibilities:

Performs outpatient appointments and nursing care under the supervision of an advanced practice nurse or a physician.

Estimates the patient's need for nursing care (nursing diagnosis).

Draws up a plan for examination, treatment and care of patients, evaluates the dynamics of the patient's condition and the efficiency of treatment.

Records these dynamics in the medical history.

Undertakes daily rounds of patients, monitors the condition of patients and submits the data to the extended practice nurse and/or physician.

Provides support to a general practitioner and an extended practice nurse in the organisation of medical examination and patronage of patients, takes care of patients in the treatment and prevention organisation and at home (patronage) within the limits of his/her competence.

Renders citizens first medical aid, including in extreme conditions, pre-hospital and palliative medical aid.

Collects materials for laboratory tests, monitors the use of medicines in the department, ensures accounting, storage and use of medicines.

Ensures fulfilment of doctor's prescriptions.

Helps the doctor with diagnostic and therapeutic manipulations.

Takes care of patients, administers drugs into the body, prepares patients for diagnostic tests, takes electrocardiography.

Executes simple physiotherapeutic procedures.

Keeps accounting and reporting medical documentation.

Observes medical ethics, the rules of internal labour regulations fire safety, safety and occupational health and safety, sanitary and epidemiological regime.

176. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; disinfection regulations of waste material;

basics of expertise of incapacity for work;

issues of organisation of activities of nursing staff;

rules and regulations on safety and labour protection, industrial sanitation and fire safety.

177. Qualification requirements:

technical and vocational medical education majoring in "Nursing" or "General Medicine", "Midwifery", a certificate of certification course in "Nursing" and a certificate of a healthcare specialist majoring in "Nursing" or "General Medicine" or specialising in "Laboratory Diagnostics", "Laboratory Paramedic", "Hygiene, Sanitation and Epidemiology", "Sanitary Paramedic", "Dentistry", "Dentist", for persons who started this position prior to January 01, 2005, a certificate of certification course majoring in "Nursing" or post-secondary education majoring in "Nursing" (applied bachelor's degree) or higher medical education majoring in "Medicine", "Pediatrics", bachelor's degree in "General Medicine", "Nursing" and a certificate of specialist in "Nursing".

#### Section 3-1. Patronage nurse (patronage nurse/male nurse).

Footnote: Chapter 7 has been supplemented with Section 3-1 in accordance with the Order № 82 of the Minister of Healthcare of the Republic of Kazakhstan dated 21 August 2025 (shall enter into force upon the expiration of ten calendar days after the day of its first official publication).

177-1. Job responsibilities:

Plans home visits with the definition of the specific purpose of the visit.

Provides two universal home visits to pregnant women and ten universal visits to young children in accordance with the order of the Minister of Healthcare of the Republic of Kazakhstan dated 15 March 2022 № KR HCM-25 "On approval of the standard for organizing the provision of pediatric care in the Republic of Kazakhstan" (registered in the Register of state registration of regulatory legal acts under № 27182).

If risks to health, development, and safety are identified, the provider shall make additional home visits to pregnant women and young children in accordance with an individual plan and inform the physician of the identified risks.

When risks are identified that require the participation of other specialists (social worker, psychologist, pediatrician, profiled specialists), nurse shall take part in the development and implementation of a comprehensive family support plan.

When a sick child is identified, a nurse shall assess the presence of danger signs, urgent signs and provide emergency assistance within the scope of authority of a mid-level health worker, and notify the doctor.

Provides training to pregnant women, parents or legal guardians of children on preparation for childbirth, care of young children, safe environment, and early child development.

Provides consultation to pregnant women, parents, or legal guardians of children on issues of nutrition, care, safety, and hygiene of the home environment and family living conditions, exclusive breastfeeding, danger signs and risks to life, health, and development.

Maintains medical records and reports.

Complies with medical ethics, internal work regulations on fire safety, occupational health and safety, and sanitary and epidemiological regulations.

#### 177-2. Must know:

The Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offenses", the Law of the Republic of Kazakhstan "On Combating Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", rules for the disinfection of waste material; issues of organizing the activities of mid-level medical personnel, rules and regulations on safety and labour protection, industrial sanitation and fire safety.

## 177-3. Qualification requirements:

professional medical education in the specialty "Nursing" or "General Medicine", "Obstetrics", and a specialist certificate in the specialty "Nursing" or "General Medicine", "Obstetrics", advanced training: a universal and progressive model of patronage, integrated management of childhood diseases.

#### Paragraph 4. Medical (specialised) nurse (brother)

#### 178. Job responsibilities:

Under supervising of an advanced practice nurse or a physician, performs nursing care, estimates the patient's need for nursing care, evaluates the dynamics of the patient's condition and the efficiency of treatment, monitors the patient's condition and reports data to an advanced practice nurse and/or a physician.

Renders first aid, including in extreme conditions, pre-hospital specialised, palliative care, collects materials for laboratory tests, sterilises medical instruments, dressings and patient care items.

Ensures correct fulfilment of doctor's appointments, aides the doctor in implementing diagnostic and therapeutic manipulations.

Provides a full range of measures to care for patients of different ages and pathologies, the introduction of drugs into the body, prepares patients for diagnostic tests, surgical interventions, takes an electrocardiogram.

Performs physiotherapeutic procedures.

Draws up requirements for the receipt of drugs and medical devices, controls their use, storage.

Maintains accounting and reporting medical documentation.

Administers specialised care in the post-operative period. Performs dressings and wound care.

Aids the doctor and the extended practice nurse in disease prevention and healthy lifestyle , promotes healthy lifestyles and hygiene education of the population.

Observes medical ethics, approved work schedule, internal labour order, fire safety, occupational health and safety, sanitary and epidemiological regime.

179. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

the organisational structure of the treatment and prevention facility;

procedure of disinfection of waste material;

issues of organisation of nursing activities;

procedure and norms for safety and labour protection, industrial sanitation and fire safety. 180. Qualification requirements:

technical and vocational medical education majoring in "Nursing" (or "Medicine", "Midwifery") a certificate of certification course in "Nursing" and a certificate of a healthcare specialist majoring in "Laboratory Diagnostics" or "Laboratory Feldsher" or "Hygiene, Sanitation and Epidemiology" or "Sanitary Paramedic" or "Dentistry" or "Dentist".

For persons who assumed this position prior to January 1, 2005, a certificate of certification course in nursing or post-secondary education in nursing (applied bachelor's degree) or higher medical education in medicine or paediatrics, bachelor's degree in general medicine or nursing and a certificate of specialist with technical and vocational, post-secondary medical education.

### Paragraph 5: Medical nurse (brother) of the medical unit in educational institutions

## 181. Job responsibilities:

The nurse's job is to ensure health protection and dynamic monitoring of schoolchildren's health.

She organises health-improving activities during the school period and holidays, preventive medical examinations in educational institutions, including with the involvement of visiting teams of specialists.

Introduces health-saving technologies aimed at preventing diseases in secondary education organisations, and implements and observes the principles of rational nutrition and reproductive health protection.

Performs work on mental healthcare, prevention of suicidal behaviour and addictions caused by the use of tobacco products, non-medical use of psychoactive substances and pathological attraction to gambling.

Directs schoolchildren to in-depth health examinations based on the results of preventive check-ups.

Ensures scheduled, seasonal or on epidemiological indications vaccination of the target contingent of students and their subsequent monitoring.

Organises educational seminars, trainings and lectures on disease prevention, promotion and formation of a healthy lifestyle among schoolchildren, and first aid.

Involves parents and teachers in protecting the health of schoolchildren by conducting educational and awareness-raising activities.

Renders primary aid to students, teaching and technical staff in cases of acute and exacerbation of chronic diseases and injuries (emergency aid, referral to the local polyclinic, calling an ambulance).

Keeps accounting and reporting medical documentation.

Observes medical ethics, internal labour order, fire safety, occupational health and safety, sanitary and epidemiological well-being.

182. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; procedure for disinfection of waste material;

issues related to the organisation of activities of nursing staff;

procedures and norms for occupational health and safety, industrial sanitation and fire safety.

## 183. Qualification requirements:

technical and vocational medical education majoring in "Nursing" or "General Medicine" or "Midwifery", a certificate of specialist in the field of healthcare in the relevant specialty for persons who assumed this position prior to January 1, 2005, a certificate or a document of certification cycle "Nursing in School Medicine" majoring in "Nursing" or post-secondary education majoring in "Nursing" (applied bachelor's degree) or higher medical education majoring in "Nursing" (applied bachelor's degree) or "Paediatrics" or bachelor's degree in "General Medicine" or "Nursing", a certificate of certification cycle "Nursing in School Medicine" and a specialist certificate with a medium level qualification.

#### Paragraph 6. Dietary nurse

184. Job responsibilities:

Ensures the organisation of rational therapeutic nutrition in healthcare centres.

Draws up daily menus, food card indexes, menu-layouts.

Oversees the observance of instructions for the preparation of therapeutic food, the order of discharge of food to patients, and the receipt of food transfers.

Systematically monitors the chemical composition and caloric content of the diet, sends dishes for laboratory testing, bears responsibility for the quality of prepared food.

Ensures adherence to sanitary norms in the food unit.

Monitors the regularity of health check-ups of employees, organises technical minimum among the technical and service staff of the food unit.

Keeps accounting and reporting documentation.

Adheres to medical ethics, internal labour regulations, fire safety, occupational health and safety, sanitary and epidemiological regime.

185. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

common issues of organisation and basic principles of therapeutic nutrition, basics of dietetics, food preparation technology;

procedures and norms for labour safety and protection, industrial sanitation and fire safety

186. Qualification requirements:

technical and vocational medical education majoring in "Nursing" or "General Medicine" or "Midwifery" or "Hygiene and Epidemiology", a certificate of advanced training in dietetics .

in case of higher (nursing) medical education and post-secondary (bachelor's) education, a certificate of advanced training in dietetics, a certificate of a specialist in the field of healthcare with a medium level of qualification.

## Paragraph 7: Dental hygienist

187. Job responsibilities:

Diagnoses dental caries, periodontal diseases, non-carious lesions, mucous membrane diseases and registers the patient's dental status.

Assesses the hygienic condition of the oral cavity and instructs the patient in methods of cleaning teeth, gives individual recommendations on the choice of hygiene products for children and adults, on the care of orthodontic and orthopaedic constructions.

Implements preventive procedures and hygienic measures aimed at preserving the dental health of the population and developing skills of rational oral care.

Draws up and implements a programme of individual prevention of dental diseases.

Performs prevention of major dental diseases of children of organised children's groups, dental education among the population of different age groups, medical staff, pre-school teachers, teachers, parents, surveying the population on the prevention of dental diseases.

Maintains accounting and reporting medical documentation.

Adheres to medical ethics, internal labour regulations, fire safety, occupational health and safety, sanitary and epidemiological regime.

188. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; principles of population health check-up;

indices of caries and periodontal disease intensity registration,

hygienic state of the oral cavity;

methods and means of individual and professional oral hygiene;

techniques of instrument sterilisation; basics of the organisation of dental care;

procedures and norms for labour safety and protection, industrial sanitation and fire safety

## 189. Qualification requirements:

technical and vocational medical education majoring in "Dentistry" (qualifications " assistant dentist" or "dental hygienist" or "dentist"), specialist certificate in speciality profile

## Paragraph 8. Dentist

190. Job responsibilities:

Conducts work on prevention of dental diseases and lesions, treatment of dental caries, treatment of temporary teeth and simple extraction of teeth in children and adults.

Maintains accounting and reporting medical documentation.

Adheres to medical ethics, internal labour order, fire safety, occupational health and safety , sanitary and epidemiological regime.

#### 191. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; the methods of first aid in emergency conditions;

the procedure for storing medicines and medical devices;

procedures and norms for occupational health and safety, industrial sanitation and fire safety.

## 192. Qualification requirements:

technical and vocational medical education majoring in "Dentistry" (qualification "dentist " or " dental doctor"), a certificate of specialist in the field of healthcare according to the profile of the speciality or higher medical education majoring in "Dentistry".

#### Paragraph 9. Assistant to a dentist (dental assistant)

## 193. Job responsibilities:

Registers the patient's dental status, administers emergency pre-hospital care in case of acute diseases in the maxillofacial region, observance of sanitary and epidemiological regime in dental institutions.

Assesses the hygienic condition of the oral cavity of patients and instructs them in methods of cleaning teeth, gives individual recommendations on the choice of hygiene products for children and adults, on the care of orthodontic and orthopaedic constructions.

Keeps accounting and reporting medical documentation.

Assists the dentist in the treatment of diseases and lesions of the teeth, oral cavity and maxillofacial region.

Adheres to medical ethics, internal labour order, fire safety, occupational health and safety , sanitary and epidemiological regime.

## 194. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On

Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

the methods of first aid in emergency conditions;

principles of population health check-up;

indices of registration of caries and periodontal diseases intensity, hygienic state of the oral cavity;

methods and means of individual and professional oral hygiene;

techniques of instrument sterilisation;

types and methods of dental prosthetics and specifics of working with prosthetic material; procedures and norms on safety and labour protection, industrial sanitation and fire safety. 195. Qualification requirements:

technical and vocational medical education majoring in "Dentistry" (qualifications " assistant to a dentist" or "dental hygienist" or "dentist"), a certificate of a specialist in the field of healthcare.

## Paragraph 10. Dental technician (laboratory technician of dental prosthetic unit, office)

196. Job responsibilities:

Makes dentures, artificial crowns, including metal-ceramics, simple structures of post teeth, bridges, brackets and removable plates, orthodontic and maxillofacial structures.

Makes impressions and fabricates working models from various materials.

Conducts soldering, alloying, annealing, bleaching, finishing, polishing of parts, prostheses and devices.

Systematically supplements the department (office) with medical tools, medicines and materials, ensures the safety of property and medical equipment in the department and timely repair of equipment, correct accounting and storage of potent, poisonous, narcotic and psychotropic drugs.

Ensures compliance with the order of asepsis and antisepsis, timely and accurate fulfillment of the tasks of the dentist, the performance of work on dental prosthetics.

Keeps accounting and reporting medical documentation.

Observes medical ethics, internal labor regulations, fire safety, occupational health and safety, sanitary and epidemiological regime.

197. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of

Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

basics of medical dental care;

organization of production of the dental laboratory;

basic materials used in dental prosthetics;

procedures and norms for labor safety and protection, industrial sanitation and fire safety.

198. Qualification requirements:

technical and vocational medical education majoring in "Orthopedic Dentistry" and "Dentistry", qualification "Dentist", a certificate of advanced training majoring in "Orthopedic Dentistry".

#### Paragraph 11. Medical laboratory technician

199. Job responsibilities:

Performs laboratory tests under the direction of a doctor and independently prepares laboratory equipment, reagents, chemical dishes, nutrient media, dyeing and disinfectant solutions;

Accepts and registers biological material received for studies;

Inspects the conformity of its packaging and time of delivery to the necessary requirements;

Checks the suitability of the material received for research, the accuracy of the accompanying documentation;

Prepares standard and working solutions for grading instruments, nutrient media, reagents , paints and disinfectant solutions;

Sterilizes laboratory instruments, utensils;

Reports results of tests to the physician. Maintains accounting and reporting medical documentation;

Performs various computational and graphical works related to the conducted studies;

Observes medical ethics, internal labor order, fire safety, occupational health and safety, sanitary and epidemiological regime;

200. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; microbiologic diagnostics of the main infectious diseases;

basics of sanitary-microbiological research, methods of general clinical, biochemical, hematological and cytological laboratory research;

techniques of laboratory research with the use of laboratory equipment;

procedure of operation of laboratory equipment, control and measuring equipment;

procedure and norms of occupational safety and labor protection, industrial sanitation and fire safety.

201. Qualification requirements:

technical and vocational medical education majoring in "Medical Laboratory Technician", "Public Health" and a certificate of specialist in the field of public health in the relevant specialty.

#### Paragraph 12. X-ray technician

202. Job responsibilities:

Performs radiologic examinations under the supervision of a doctor, as well as performs radiologic examinations on dental X-ray devices.

Independently prepares radiologic equipment, reagents, X-ray films.

Prepares patients for contrast methods of examination.

Properly executes the accompanying documentation.

Maintains accounting and reporting medical documentation.

Performs stacking (conventional, complex) when taking x-ray examinations.

Produces, develops, washes, fixes, marks, dries radiographs.

Provides pre-hospital care for emergency conditions.

Observes medical ethics, internal labor order, radiation safety, fire safety, occupational health and safety, sanitary and epidemiological regime.

203. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

biological effects of X-rays and dosimetry methods;

principles of protection of medical personnel and patients;

photolaboratory process, X-ray technology;

principles of operation of X-ray machines;

principles, features, rules and methods of X-ray examinations of all organs and systems, X-ray examinations in pediatrics, dentistry;

principles of fluorography and radiography, computed tomography and magnetic nuclear resonance, angiography;

procedures and norms of occupational safety and health, industrial sanitation and fire safety.

204. Qualification requirements:

technical and vocational medical education in "Nursing" (or "General Medicine" or "Midwifery" or "Dentistry" or "Laboratory Diagnostics") and a certificate of completion of the certification course "Nursing in Radiology".

#### Paragraph 13. Optician and optometrist

205. Job responsibilities:

Examines patients' visual functions using modern ophthalmic diagnostic equipment.

Performs visual acuity testing, perimetry, refractometry, ophthalmometry, biomicroscopy, tonometry.

Examines binocular vision, determines the type and degree of ametropia, the presence of astigmatism.

Diagnoses the main signs of diseases of the organ of vision.

Selects means of vision correction.

Gives individual recommendations on their care.

Takes part in determining applications for eyeglass optics products.

Render emergency medical aid in acute diseases and injuries of the organ of vision (including removal of foreign bodies from the surface of the conjunctiva of the eye).

Finds out among the persons in need of complex vision correction and treatment by an ophthalmologist and refers them to him/her.

Takes part in hygienic education and promotion of a healthy lifestyle among the population.

Maintains accounting and reporting documentation.

Observes medical ethics, internal labor order, fire safety, occupational health and safety, sanitary and epidemiological regime.

206. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; basic concepts and laws of geometric optics;

basic techniques of pre-hospital care in emergency conditions, modern vision-correcting materials;

procedures and norms on labor safety and protection, industrial sanitation and fire safety. 207. Qualification requirements:

technical and vocational medical education majoring in "Medical Optics", a certificate of specialist in "Medical Optics"

#### Paragraph 14. Physical therapy instructor

208. Job responsibilities:

Prepares the room, gymnastic items and equipment for physical therapy classes.

Monitors the well-being of patients before and after the classes.

Holds classes with patients in the pool and on mechanotherapeutic devices.

At the prescription of the physician conducts certain types of therapeutic massage.

Jointly with the physician for physical therapy develops therapeutic gymnastics schemes and sets of physical exercises.

Holds individual and group classes of therapeutic and hygienic gymnastics, performs functional tests with physical load, evaluates physical development, physical efficiency of a person, function of external respiration, cardiovascular system, neuromuscular apparatus in the course of therapeutic physical training.

Ensures observance of sanitary and hygienic requirements for the organization of the work of premises for group and individual physical therapy classes.

Administers first aid in emergency conditions.

Keeps accounting and reporting medical documentation.

Adheres to medical ethics, internal labor order, fire safety, occupational health and safety, sanitary and epidemiological regime.

209. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; basics of anatomy, physiology and pathophysiology of the organism, age physiology; techniques of therapeutic physical training for patients with various diseases; indications and contraindications for therapeutic physical training;

basics of therapeutic massage, types and kinds of massage;

potential complications during therapeutic physical training, measures to prevent and eliminate them;

procedures and norms for occupational health and safety, industrial sanitation and fire safety.

#### 210. Qualification requirements:

technical and vocational (specialized secondary, secondary vocational) (medical, physical education) education majoring in "Nursing" or "General Medicine" or "Midwifery"; physical education) a certificate of advanced training in the relevant specialty.

# Paragraph 15. Medical registrar

#### 211. Job responsibilities:

Keeps registration of patients who have applied for health care in the medical organization

Ensures storage and delivery of medical records to the physician's office in the polyclinic or to the inpatient unit.

Reports monthly to the medical statistician of the organization.

Adheres to medical ethics, internal labor order, fire safety, occupational health and safety, sanitary and epidemiological regime.

# 212. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; communication skills in dealing with patients and staff;

procedures and standards for occupational health and safety, industrial hygiene and fire safety.

# 213. Qualification requirements:

technical and vocational medical education, certificate of advanced training in the relevant profile without requirements for length of service.

# Paragraph 16. Assistant to epidemiologist \*

# 214. Job responsibilities:

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Undertakes sanitary and anti-epidemic (preventive) measures, sanitary and educational work among the population, including hygienic training and education, promotion of healthy lifestyles, as well as sanitary and epidemiological inspection of facilities and epidemiological foci with sampling for laboratory research: food, goods, products, construction materials, consumer goods, toxic, radioactive and biological substances, drinking water, wastewater, soil and their laboratory and instrumental examination.

Works in foci of infectious and parasitic diseases caused by pathogens, including particularly dangerous infections.

Performs laboratory tests on the isolation of pathogenic microorganisms from clinical material and material from environmental components (for microbiological laboratories).

Takes part in the collection and processing of materials.

Keeps accounting and reporting medical documentation.

Ensures registration, recording and statistical processing of data on infectious and non-infectious morbidity.

Monitors the serviceable condition of laboratory equipment.

Prepares equipment for laboratory tests, instrumental measurements.

Adheres to medical ethics, internal labor order, fire safety, occupational health and safety, sanitary and epidemiological regime.

#### 215. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; legal and regulatory acts and documents in the field of hygiene and epidemiology procedures and standards for occupational health and safety, industrial sanitation and fire safety.

# 216. Qualification requirements:

technical and vocational education majoring in "Hygiene and Epidemiology" or technical and vocational medical education, a certificate of specialist in the field of healthcare in the respective specialty.

#### \*Note:

For positions handling pathogenic biological agents of pathogenicity group, I and (or) II, a certificate of certification course on handling pathogenic biological agents and a document on advanced training in the field of biological safety.

#### Paragraph 17: Sanitary and epidemiological laboratory technician \*

#### 217. Job responsibilities:

Sampling to epidemiological foci for laboratory research: food, goods, products, construction materials, consumer goods, toxic, radioactive and biological substances, drinking water, wastewater, soil and their laboratory and instrumental studies.

Takes part in the collection and processing of materials.

Keeps accounting and reporting medical records.

Keeps laboratory equipment in good working order.

Prepares equipment for laboratory tests, instrumental measurements.

Adheres to medical ethics, internal labor order, fire safety, occupational health and safety, sanitary and epidemiological regime.

Performs laboratory studies on the isolation of pathogenic microorganisms from clinical material and material from components of the external environment (for microbiology laboratories).

#### 218. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; procedures and standards for occupational health and safety, industrial sanitation and fire safety.

# 219. Qualification requirements:

Technical and vocational education in the spheres of personnel training: "Hygiene and Epidemiology" or "Laboratory Diagnostics" or "Natural Sciences, Mathematics and Statistics", certificate of specialist in the field of public health in the relevant specialty.

\*Note:

For positions involving handling of pathogenic biological agents of pathogenicity group I and (or) II, a document on certification course on handling of pathogenic biological agents and a document on advanced training in the field of biological safety.

# Paragraph 18. Disinfectant instructor

# 220. Job responsibilities:

Performs work on disinfection measures, identifies their scope, methodology and means of disinfection, disinsection and deratization of individual objects.

Works in foci of infectious and parasitic diseases caused by pathogens, including particularly dangerous infections.

Supervises the disinfection team and participates in the final and preventive disinfection of facilities.

Supervises the preparation and use of disinfection solutions, the use of equipment and tools, the quality of disinfection, and the disinfectors' compliance with the rules of personal and public safety.

Monitors observance of techniques when performing disinfection, deratization and disinsection works.

Draws up documentation for disinfection works.

Adheres to medical ethics, internal labor regulations, fire safety, occupational health and safety, sanitary and epidemiological regime.

#### 221. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

procedure and conditions for using personal protective equipment and first aid in case of poisoning;

nomenclature and consumption rates of disinfectants;

conditions of storage and transportation of disinfectants;

order and norms for labor safety and protection, industrial sanitation and fire safety.

222. Qualification requirements:

technical and vocational education majoring in "Hygiene and Epidemiology" or technical and vocational medical education, a certificate of specialist in the field of public health in the respective specialty.

# Paragraph 19. Public health social worker

# 223. Job responsibilities:

Under the supervision of a public health social worker, provides care for patients in a therapeutic and preventive healthcare facility and at home.

Observes the patient's condition.

Facilitates medical and psychological treatment of patients, helps the patient to adapt to new conditions of stay.

Solves issues of social support of the patient (execution of requests, legal documents, participation or aid in making referrals to medical and social expert evaluation, to a home for the elderly and persons with disabilities).

At the request of patients, organises religious needs and relatives of patients for funeral ritual ceremonies.

Keeps accounting and reporting documentation on the social service.

Adheres to medical ethics, internal labour order, fire safety, occupational health and safety, sanitary and epidemiological regime.

224. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", Law of the Republic of Kazakhstan 'On Social and Medical-Pedagogical Correctional Support for Children with Disabilities", the Law of the Republic of Kazakhstan "On the Rights of the Child in the Republic of Kazakhstan", the Law of the Republic of Kazakhstan "On Social Protection of Persons with Disabilities in the Republic of Kazakhstan", the Law of the Republic of Kazakhstan "On Special Social Services", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

basic principles of organising social and domestic services for lonely persons with disabilities and children with disabilities;

psychological and physiological features of elderly people, organisation of communal and domestic services;

techniques of emergency pre-hospital care;

procedures and norms on labour safety and protection, industrial sanitation and fire safety. 225. Qualification requirements.

technical and vocational (social, medical, psychological, pedagogical) education, a certificate of advanced training in the relevant field.

## Paragraph 20. Medical nurse (medical brother) assistant

226. Job responsibilities:

Fulfils his/her duties under the direction of a nurse.

Provides basic nursing care to patients in the treatment and prevention centre and at home, including personal hygiene, changing of bed and bed linen, feeding a patient with limited self-care, observes and estimates the patient's condition.

Assists the general practice nurse in the implementation of nursing interventions for the patient.

Secures transport, escorts and transfers patients.

Performs anthropometric measurements and records patient data.

Keeps accounting and reporting medical documentation.

Ensures cleanliness of patients, premises.

Supervises the proper use, storage and sterilisation of instruments, patient care items, dressings and patient care items, carries out disinfection measures.

Adheres to medical ethics, internal labour regulations, fire safety, safety, occupational health and safety, sanitary and epidemiological regime.

227. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; on administrative offences, on combating corruption;

issues related to the organisation of nursing activities;

rules and regulations on safety and labour protection, industrial hygiene and fire safety.

228. Qualification requirements:

technical and vocational (medical) education majoring in "Nursing" with no requirements for work experience.

# Paragraph 21. Medical massage therapist

#### 229. Job responsibilities:

Supervises observance of sanitary and hygienic requirements for the organisation of the massage room and the masseur's workplace.

Prepares patients for massage, monitors the condition of patients during the procedures.

Provides therapeutic (classical), segmental, acupressure, sports, hygienic, cosmetic, apparatus massage, underwater shower massage.

Practises massage techniques for diseases and injuries of the musculoskeletal system, central and peripheral nervous system, internal organs, metabolic diseases, genitourinary system, skin in the postoperative period of rehabilitation treatment in surgery.

Practises techniques of massage in children, massage and exercise in early childhood.

Adheres to the rules for combining massage with physical therapy, physiotherapeutic procedures, traction, manual therapy, occupational health and safety requirements, occupational health and fire safety requirements for the operation of premises, equipment and facilities used for medical massage classes.

Ensures infection safety of patients and medical staff, fulfils infection control requirements in the massage room.

Keeps accounting and reporting medical documentation.

Respects moral and legal norms of professional communication, fulfils the requirements of labour discipline.

Provides sanitary-educational work.

230. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; procedures and standards for occupational health and safety, industrial sanitation and fire safety.

231. Qualification requirements:

technical and vocational medical education majoring in "Nursing" (or "General Medicine", "Midwifery"), certification course in "Classical and Therapeutic Massage" speciality.

#### Paragraph 22. Senior medical laboratory technician

232. Job responsibilities:

Supervises the quality of work of junior medical personnel.

Monitors adherence of junior medical personnel to safety rules and sanitary and epidemiological regime.

Supplies the unit staff with the necessary equipment, consumables, reagents and medical devices for their work.

Under the supervision of a physician and independently prepares laboratory equipment, reagents, chemical dishes, nutrient media, dyeing and disinfectant solutions for laboratory studies.

Accepts and registers biological material for examination, checks whether its packaging and time of delivery conform to the necessary requirements.

Checks the suitability of the material received for research, the accuracy of the accompanying documentation.

Prepares standard and working solutions for calibration of instruments, nutrient media, reagents, colours and disinfectant solutions.

Sterilises laboratory instruments and utensils.

Transfers the results of research to the doctor.

Keeps accounting and reporting medical documentation.

Performs various computational and graphical work related to the research.

Adheres to medical ethics, internal labour order, fire safety, occupational health and safety , sanitary and epidemiological regime.

#### 233. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; microbiological diagnostics of the main infectious diseases;

basics of sanitary-microbiological research, methods of general clinical, biochemical, haematological and cytological laboratory research;

techniques of laboratory research with the use of laboratory equipment;

procedure for the operation of laboratory equipment, control and measuring equipment; procedure and norms for safety and labour protection, industrial sanitation and fire safety.

# 234. Qualification requirements:

technical and vocational medical education majoring in "Laboratory Diagnostics" and a certificate of advanced training in the relevant speciality or higher education majoring in "Healthcare", bachelor's degree in "General Medicine" and a certificate of advanced training in the relevant speciality.

# Paragraph 23: Radioisotope (radionuclide) diagnostic laboratory technician

#### 235. Job responsibilities:

Undertakes radioisotope examinations on the devices pursuant to the technological regulations and standards of operating procedures.

Under the direction of the physician, plans, organises and implements the therapeutic and diagnostic process.

Improves the quality of the captured images by eliminating artefacts arising during diagnostic studies.

Reviews the obtained sinograms, performs qualitative and quantitative processing of reconstructed data.

Elaborates standard operating procedures for the implemented innovative methods of radioisotope (radionuclide) examination.

Under the guidance of a more qualified expert, takes part in the test of acceptance of newly acquired equipment and apparatus, mastering them for diagnostic studies.

Reviews the standardised accumulation level of radiopharmaceutical normalised to body weight.

Keeps records of equipment inspection and use and observed malfunctions.

Develops and improves data collection protocols for radioisotope (radionuclide) studies.

Works to reduce the doses administered of radiopharmaceuticals and x-rays received by the patient during examinations.

Takes part in examining the causes causing deterioration in the quality of diagnostic examinations, participates in the development and implementation of measures to eliminate them.

236. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; methodological and other materials, orders, instructions, directives, orders, instructions, regulatory and administrative documents regulating labour activities;

sanitary order and norms in the field of radiation safety;

internal labour regulations, occupational health and safety, industrial hygiene, fire safety requirements.

# 237. Qualification requirements:

technical and vocational (medical) education majoring in "Nursing" and a certificate of completion of the certification course "Nursing in Radiology", at least 1 year of work experience in the speciality;

or higher education in "Medical Care", "Paediatrics", "Preventive Medicine", "Stomatology", "General Medicine", "Medical and Biological Science" and a certificate of advanced training in radioisotope (radionuclide) diagnostics, with no requirements for work experience.

# Paragraph 24. Medical nurse and or medical brother of radiation equipment (radiotherapy technologist)

#### 238. Job responsibilities:

Records patients referred for radiation therapy.

Input patient data and radiation plan parameters into the control computer of the radiation equipment.

Jointly with the radiation therapist, prepares the patient for the radiation therapy session and sets the parameters of the device (size of the radiation field, position of the gantry, collimator and treatment table, source-to-surface distance).

Monitors the patient during the treatment using a television device, two-way telephone communication.

Supervises the work of nursing staff and the sanitary condition of the radiation therapy room.

Takes portal images and adjusts the position of the treatment table on accelerators with a portal imaging system under the direction of a physician or medical physicist engineer.

Completes radiation charts and topometric charts in a timely manner.

Prepares radiotherapy machines for operation and ensures that they are operating correctly

#### 239. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; methodological and other materials, orders, instructions, directives, orders, instructions, regulatory and administrative documents governing labour activities;

sanitary procedures and norms in the field of radiation safety;

internal labour regulations on occupational health and safety, industrial sanitation, fire safety requirements.

# 240. Qualification requirements:

technical and vocational education majoring in "Nursing" and a certificate of completion of the certification course "Nursing in Radiology", at least 1 year of work experience in the speciality;

or higher education in "Medical Care", "Paediatrics", "Medical and Preventive Medicine", "Dentistry", "General Medicine", "Medical and Biological Science" and a certificate of advanced training in radiation equipment (radiotherapy technology) with no requirements for length of service.

# Chapter 8: Qualification specifications of positions of workers with technical and vocational education in pharmacy Paragraph 1: Pharmacy technician

# 241. Job responsibilities:

Distributes medicines and medical devices via pharmacy organisations as prescribed by physicians and over-the-counter sales.

Clarifies to the population the rules of application, use, storage of medicines and medical devices at home.

Arranges and maintains storage of medicines and medical devices in pharmacy organisations.

Sorts incoming medicines and medical devices, determines storage locations taking into account their physical and chemical properties, requirements to conditions and storage regime of special groups of medicines and medical devices.

Withdraws expired medicines and medical devices that are doubtful upon visual inspection or have become unusable due to storage, falsified and counterfeit products.

Manufactures medicinal products defined by pharmacy technology, dosage forms, taking into account quality control at all stages of the technological process.

Performs technological processes used in the manufacture of extemporaneous medicines.

Arranges the workplace for manufacturing of extemporaneous dosage forms according to the physician's prescriptions and requirements of the medical organisation.

Estimates the formulation based on the physico-chemical, pharmacological properties of the substance and selects the manufacturing process.

Ensures the availability of substances, instruments, tools, equipment, auxiliary material and packaging in the required volumes.

Interacts with the population observing the norms of ethical behaviour and deontology.

Provides pre-hospital medical care.

242. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

pharmacological groups of medicines, their specifications, medical indications and methods of use, contraindications, side effects, synonyms and analogues of medicines;

procedure for collecting information on side effects of medicines;

norms of ethics of work with the population and deontology;

merchandising in pharmacy organisations, storage of medicines and medical devices in pharmacy organisations;

keeping records of expiry dates of medicines and medical devices and taking measures to avoid them;

technology of manufacturing dosage forms;

physico-chemical properties of drug substances, storage, physico-chemical and pharmacological compatibility;

sanitary norms and the procedure for manufacturing dosage forms in a pharmacy; procedure of pre-hospital medical aid;

procedure and norms for labour safety and protection, industrial sanitation and fire safety.

243. Qualification requirements:

technical and vocational education majoring in "Pharmacy", a certificate of specialist in "Pharmacy" speciality.

#### Chapter 9. Qualification specifications of junior staff positions Paragraph 1. Sanitary worker

#### 244. Job responsibilities:

Cleans the premises in line with general sanitary norms.

Provides serving, cleaning of the urinal.

Cleans bedside tables (tables) of bedridden patients after each meal.

Receives linen, household equipment, disinfectants and detergents from the nurse-mistress , washes laboratory and pharmacy utensils, collects solid household and medical waste.

After working with pathogenic microorganisms, cleans the contagious zone of laboratories and sanitary passages.

Washes laboratory utensils, disposes of waste biomaterial.

Adheres to medical ethics, internal labour order, biological safety requirements, fire and emergency safety, health and safety procedures, sanitary and epidemiological regime.

#### 245. The employee must know:

basics of the Constitution of the Republic of Kazakhstan, on the public health and healthcare system, civil and labour legislation, order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

ways of caring for clothes and shoes, types of fabrics, ways of cleaning, washing and ironing;

sanitation and hygiene procedures;

the purpose of detergents and how to handle them;

labour safety, industrial sanitation and fire safety procedures and norms.

# 246. Qualification requirements:

primary or secondary general education, individual training with no requirements for work experience.

# Chapter 10. Qualification specifications of positions of workers with technical and vocational non-medical education Paragraph 1: Laboratory technician of quality control of radiopharmaceutical medicines

#### 247. Job responsibilities:

Prepares equipment (instruments, apparatus) for research, tests and makes simple adjustments as per the developed instructions and technical documentation.

Supplies the employees of the unit with the necessary equipment, consumables, reagents and medical devices.

Performs required operations (manipulations) on sampling and labelling in accordance with established procedures.

Selects and prepares required chemical utensils, auxiliaries and equipment for testing.

Prepares laboratory equipment, materials and facilities for testing radiopharmaceutical drugs, raw materials and packaging materials, intermediate products and objects of the production environment.

Prepares reagent solutions for analyses.

248. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

good manufacturing practice procedures;

implementation of sampling procedures;

validation of analytical techniques;

handling precursors and poisons;

performing physico-chemical and analytical tests;

laboratory equipment, instrumentation and its operation;

principles of Good Manufacturing Practice (GMP);

internal labour regulations, occupational health and safety, industrial hygiene, fire safety requirements.

# 249. Qualification requirements:

technical and vocational education in the relevant speciality (pharmaceutical, chemical, biological) with no requirements for work experience.

#### Paragraph 2: Instrumentation and automation technician in nuclear medicine

#### 250. Job responsibilities:

Under the supervision of a more qualified expert repairs and maintains instrumentation and automation equipment.

Studies new types and means of control-measuring devices and automatics at the existing facilities of the enterprise and laboratory.

Under the guidance of a more qualified expert ensures trouble-free operation of the equipment serviced by the section of control and measuring instruments and automation at the facilities of the enterprise.

Ensures rational use of materials, spare parts, equipment and other resources by site employees.

Keeps equipment, tools, materials, household and firefighting equipment, and personal protective equipment in good working order.

Under the direction of a more qualified specialist, ensures high quality of work performed

Under the supervision of a more qualified expert, observes the technology of repair works

Under the supervision of a more qualified expert, operates the equipment and communications of the site under the established procedure.

Takes part in the development of instructions for the use and maintenance of instrumentation and automation for the personnel of the company's units.

Takes part in determining the scope of repair work, preparing schedules of preventive maintenance and technical documentation.

Participates in analysing the reasons for malfunctions and disturbances in the operation of control and measuring instruments and automation equipment.

Submits proposals to enhance the quality of measurement and reliability of equipment operation.

Takes part in drawing up current work plans.

251. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation; methodological, regulatory, guiding materials concerning production and economic

activities (site, shop, department);

equipment and communications (site, shop, department), its operation and repair procedure, design features;

the procedure for accepting equipment for repair and handing it over after repair; organisation and technology of repair works;

the procedure of scheduled preventive repairs;

procedure for compiling defect lists and requests for equipment, materials, spare parts, tools;

regulations, procedures and instructions on industrial safety and environmental protection, industrial sanitation;

procedure for arrangement and operation of electrical installations;

basics of economics, production organisation, labour and management;

internal labour regulations, safety and labour protection, industrial hygiene, fire safety requirements.

#### 252. Qualification requirements:

technical and vocational education in the corresponding speciality (qualification) without any requirements for work experience.

#### Paragraph 3: Technician for heating, ventilation and air-conditioning systems in nuclear medicine

#### 253. Job responsibilities:

Under the supervision of an expert ensures the serviceable condition, trouble-free and reliable operation of the maintained systems of central heating, water supply, ventilation system and condensate drains, their correct operation, timely quality repair.

Reveals the causes of premature wear of the serviced systems, takes measures for their prevention and elimination.

Liquidates malfunctions in the operation of systems, repairs, installs, adjusts and tests them (disassembly, repair and assembly of complex parts and units of sanitary and technical systems of central heating, water supply ventilation and gutters, sorting of pipes, fittings, shaped parts, fittings and means of fastening, heating panels).

Takes part in drawing up requests for materials, spare parts, tools and ensures their economical and rational use.

Under the supervision of a qualified technician. Prepares repaired systems for commissioning.

Under the instruction of a qualified technician, adjusts the ventilation and air conditioning system to maintain specified temperature and humidity in the facility's rooms, using instruments and psychrometric tables;

Inspects, cleans and assists in the repair of fans, nozzles, calorifiers and pumps; supervises the condition and operation of automatic control devices;

Under the supervision of a qualified person, starts and stops ventilation and humidification units:

Under the supervision of a qualified person, disassembles, repairs, assembles, installs and maintains ventilation and air conditioning systems, water and wastewater systems and gas supply systems;

Under the direction of a qualified expert, regulates air temperature and humidity in accordance with specifications.

254. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

types and purpose of sanitation materials and equipment;

assortment and means of measuring diameters of pipes, fittings and fittings;

purpose and procedure of application of manual and mechanised tools;

principle of operation, purpose and features of repair of sanitary-technical piping systems of central heating, water supply, sewerage and drains;

methods of drilling and punching holes;

order of installation of sanitary and heating devices;

device and methods of repair of various sanitary and technical piping systems;

means of establishing defective places during testing of pipelines;

procedure for testing sanitary and technical systems and fittings;

norms of materials and spare parts consumption;

device, construction and principle of operation of ventilation and humidifying installations and automatic control devices;

parameters of humidity and temperature in production shops;

procedure of installation and charging of psychrometers;

procedure of using tables for determining air humidity indices;

cleaning mode of ventilation and humidifying installations;

order of preparation of defect lists and requests for equipment, materials, spare parts, tools

procedure of slinging, lifting and moving of cargoes by simple lifting means controlled from the floor;

ways of controlling the operation of ventilation equipment and heating systems; procedure of repair, assembly and installation of the equipment being repaired; technical terms associated with labour activity (fan-coils, split-systems, chillers);

procedure of internal labour order, safety and labour protection, industrial sanitation, fire safety requirements.

255. Qualification requirements:

Post-secondary, technical and vocational education with no work experience requirements

#### Paragraph 4. Water and wastewater technician in nuclear medicine

#### 256. Job responsibilities:

Under the supervision of a qualified expert, ensures proper condition, trouble-free and reliable operation of the central water supply, sewerage and drainage systems being serviced, their correct operation, and timely quality repairs.

Reveals the causes of premature wear and tear of the serviced systems, undertakes measures for their prevention and elimination.

Liquidates malfunctions in the operation of systems, performs their repair, installation, adjustment and testing (disassembly, repair and assembly of complex parts and units of sanitary-technical systems of water supply, sewerage and drains, sorting of pipes, fittings, shaped parts, fittings and fasteners, fitting of joints with couplings and locknuts, bolts with nuts, drilling or punching holes in structures, installation and sealing of fastenings for pipelines and devices, fitting of pipes and fittings for risers, grouping and up to grouping of cast iron radiators at the place of repair, connection of pipelines, heating panels, sanitary-technical cabins and blocks, fixing of parts and devices, marking of places for installation of control and measuring devices, change of sections of pipelines made of cast iron pipes, installation of defective places during testing of pipelines).

Takes part in the preparation of requests for materials, spare parts, tools and ensures their economical and rational use.

Prepares repaired systems for commissioning under the supervision of a qualified specialist.

Monitors loading and unloading operations when transporting pipes to the installation site. Under the supervision of a qualified specialist, disassembles, repairs, assembles, installs and maintains water supply and wastewater systems.

# 257. The employee must know:

the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Code of the Republic of Kazakhstan "On Administrative Offences", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

basics of the Constitution of the Republic of Kazakhstan, civil and labour legislation;

types and purpose of sanitation materials and equipment;

assortment and methods of measuring diameters of pipes, fittings and fittings;

purpose and procedure of application of manual and mechanised tools;

principle of operation, purpose and peculiarities of repair of sanitary-technical pipeline systems of central heating, water supply, sewerage and drains;

types of parts of sanitary-technical systems, pipe joints and pipe fastenings;

methods of drilling and punching holes;

arrangement and means of repair of pipeline sanitary and technical systems made of steel and polymer pipes;

means of marking the places of installation of devices and fastenings;

order of installation of sanitary and heating devices;

design and methods of repair of various sanitary piping systems;

ways of establishing defective places during testing of pipelines;

procedure for testing sanitary and technical systems and fittings;

means of preparation and testing of boilers, boilers, calorifiers and pumps;

norms of materials and spare parts consumption;

basics of economics, production, labour and management organisation;

procedure of drawing up defect lists and applications for equipment, materials, spare parts , tools;

order of slinging, lifting and moving of loads with simple lifting devices controlled from the floor;

procedure of repair, assembly and installation of repairable equipment;

procedure of internal labour order, occupational health and safety, industrial hygiene, fire safety requirements.

258. Qualification requirements:

Post-secondary, technical and vocational education with no requirements for work experience.

# Paragraph 5: Dosimetric technician in the field of sanitary-epidemiological service

#### 259. Job responsibilities:

Performs radiometric and dosimetric measurements in the scope of radiation monitoring of radiation situation, environmental objects, exposure of population and personnel.

260. The employee must know:

order of the Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

physical fundamentals of dosimetry and radiation safety, including:

radioactivity phenomenon;

interaction of ionising radiation with matter;

radiation-physical quantities;

dosimetry of ionising radiation;

classification, physical and technical characteristics of ionising radiation sources;

dosimetry of external exposure (collective and individual);

radiation dosimetry of incorporated radioactive substances (express methods);

basics of radiation protection against ionising radiation;

instrumentation of the unit and organisation of repair service;

measurement of radionuclide activity.

261. Qualification requirements:

technical and vocational, post-secondary education in training areas: engineering or science, mathematics or statistics.

#### Paragraph 6: Assistant entomologist (zoologist)

#### 262. Job responsibilities:

Collects material from environmental objects (ticks, rodents, droppings, nesting material), potentially infected or pathogenic, for laboratory examination in order to determine the intensity of already known foci and to identify new ones in the region;

Identifies species composition, determines the number and biotopic distribution of small mammals - carriers of natural focal infections;

Takes part in identifying natural foci of zoonotic diseases;

Monitors shifts in rodent populations associated with irrigation, watering and other human economic activities for timely implementation of measures in areas where natural foci of especially dangerous infections may take root;

Takes part in organising measures in natural foci of especially dangerous infections;

Identifies species composition, counts the number, distribution and parasitisation periods of bloodsucking arthropods - vectors and keepers of especially dangerous infections;

Takes part in the organization of mass collection of ixodal ticks for bacteriological examination for the purpose of defining the epizootological situation on the territory of the region;

Inspects epizootological survey of vector-borne outbreaks;

Prepares a forecast of the number of ixodous ticks;

Adheres to the regime of work with especially dangerous infections in the natural centre;

Undertakes sanitary and educational work among the population aimed at controlling rodents and vectors of infections;

## 263. The employee must know:

the Constitution of the Republic of Kazakhstan, Labour Code of the Republic of Kazakhstan, the Code of the Republic of Kazakhstan "On Public Health and the Healthcare System", the Law of the Republic of Kazakhstan "On Counteracting Corruption", the Law of the Republic of Kazakhstan "On Languages in the Republic of Kazakhstan", order of the

Minister of Emergency Situations of the Republic of Kazakhstan № 55 of February 21, 2022 "On Approval of the Fire Safety Rules" (recorded in the Register of State Registration of Regulatory Legal Acts under № 26867);

Fundamentals, principles and techniques of sanitary and epidemiological assessment; Systematics and ecology of wild and synanthropic animals;

Procedures and norms on safety and labour protection, industrial sanitation and fire safety

# 264. Qualification requirements:

technical and vocational education majoring in "Hygiene and Epidemiology" or higher vocational education majoring in "Natural Sciences", "Mathematics and Statistics", certificate of a healthcare expert in the relevant speciality.

#### \*Note:

For positions involving the handling of pathogenic biological agents of pathogenicity group I and (or) II, a document of certification course on the handling of pathogenic biological agents and a document of advanced training in the field of biological safety.

## Chapter 11. Alphabetical index of employee positions

- 265. An alphabetical index of the positions of officials is shown in Annex 1 to this annex.
- 266. The list of job titles of employees provided for in this directory, indicating their titles according to the previously valid qualification characteristics of the positions of "healthcare system employees", is given in Appendix 2 to this Appendix.

Footnote. Paragraph 266 is in the wording of the Order № 66 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated 16 July 2025 (shall enter into force upon expiry of ten calendar days after the date of its first official publication).

Appendix 1 to the qualification characteristics of positions of employees of the healthcare system

#### Alphabetical index of positions of employees of the healthcare system

Footnote. Appendix 1 is in the wording of Order № 66 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated 16 July 2025 (shall enter into force upon expiry of ten calendar days after its first official publication).

№	Name of positions of managers, specialists and other employees	Paragraph (§)	Page number
1	2	3	4
-	Management positions	-	15
	The head of the organization (CEO,		

1	director) of healthcare organizations of republican, regional, district and city significance and (or) a healthcare organization implementing informatization in the field of healthcare and (or) an organization of republican significance in the field of circulation of medicines and medical devices and (or) healthcare organizations operating in the field of sanitary and epidemiological welfare of the population, nuclear medicine	§ 1	16
2	Deputy head (CEO or director) of a healthcare organization (for medical affairs, for quality control of medical services, for strategic development, for organizational and methodological work, for anti-epidemic work) or a healthcare organization implementing informatization in the field of healthcare and (or) an organization in the field of circulation of medicines and medical devices and (or) a healthcare organization operating in the field of sanitary and epidemiological welfare of the population (for sanitary and epidemiological work)	§ 2	21
3	Deputy head (CEO or director) of a healthcare organization for economic and administrative support	§ 3	26
	The head of a structural unit of a healthcare organization (senior physician, head of a clinical (paraclinical) unit (department), head of a department, senior nurse (male nurse) (senior paramedic, senior		

4	obstetrician), nursing manager, head of a laboratory of a sanitary-epidemiological service organization, head of a vivarium of a sanitary-epidemiological service organization, head of a microbiological laboratory of an organization in the field of sanitary-epidemiological welfare of the population, head of the department for receiving and collecting samples in a sanitary-epidemiological service organization, head of the department of sanitary-epidemiological and laboratory analytics, head of the department of metrology and technical maintenance in the field of sanitary-epidemiological service	§ 4	27
5	Deputy nursing director	§ 5	33
6	Head nurse	§ 6	35
-	Positions of specialists in healthcare organizations	-	37
	Positions for specialists with higher and postgraduate medical education, education in the field of public health and healthcare management, sanitary and epidemiological profile	-	37
7	District doctor and/or general practitioner	§ 1	37
8	Doctor (specialist)	§ 2	39
9	Medical expert	§ 3	40
10	Forensic medical expert (general expert, forensic biological, chemical-toxicological, forensic histological, medical-criminalistic, molecular-genetic research)	§ 4	42

11	Forensic medical expert ( forensic biological, chemical-toxicological, molecular-genetic research ).	§ 5	44
12	Doctor - transplant coordinator	§ 6	45
13	Resident physician	§ 7	48
14	Intern doctor	§ 8	50
15	Healthcare manager (for the quality of medical services, for the strategy and marketing of medical services, for the organization and methodology of providing medical services, for personnel (HR manager)	§ 9	51
16	Doctor and/or public health specialist (valeologist, epidemiologist, statistician, methodologist)	§ 10	55
17	Doctor (or specialist) of the sanitary and epidemiological service	§ 11	56
18	Senior nurse (male nurse) ( senior paramedic, senior obstetrician)	§ 12	58
19	Auditor of the sanitary and epidemiological service	§ 13	59
20	Biosafety specialist in a sanitary and epidemiological service organization	§14	60
21	Sampling and seception specialist*	§15	62
22	VAD Coordinator ( Mechanical circulatory support specialist)	§ 16	63
	Positions of employees with higher and postgraduate pharmaceutical education	-	64
23	Pharmacist	§ 1	64
24	Radiopharmacist	§ 2	66
25	Engineer-technologist for the production of medicines and medical devices	§ 3	67

26	Clinical pharmacist	§ 4	69
27	Quality management manager in pharmacy	§ 5	71
28	Inspector	§ 6	72
29	Senior radiopharmacist	§ 7	74
	Positions for specialists with higher non-medical education	-	75
30	Laboratory specialist	§ 1	75
31	Specialist in the field of sanitary and epidemiological services (biologist, zoologist or epizootologist, entomologist)	§ 2	77
32	Social work specialist in healthcare	§ 3	78
33	Quality specialist in the field of sanitary and epidemiological service	§4	79
34	Quality manager in the field of sanitary and epidemiological service	<b>§</b> 5	80
35	Biosafety specialist in a sanitary and epidemiological service organization*	<b>§</b> 6	82
36	Dosimetrist engineer in the field of sanitary and epidemiological service	§7	83
37	Service engineer in the field of sanitary and epidemiological services	§8	84
38	Medical psychologist	§9	85
39	Cyclotron engineer for the production of radiopharmaceuticals	§10	86
40	Radiochemist-technologist for the production of radiopharmaceutical drugs	§11	88
41	Radiochemist-analyst for quality control of radiopharmaceutical drugs	§12	90
42	Radiopharmaceutical quality assurance specialist	§13	92
43	Engineer for servicing ventilation of facilities with open sources of ionizing radiation	§14	94

44	Engineer for maintenance of systems for collection, storage, and discharge of liquid radioactive waste	§15	96
45	Radiation safety engineer	Radiation safety engineer §16	
46	Medical physicist	§17	101
47	Nuclear medicine process and medical gas engineer	§18	102
48	HVAC Engineer in nuclear medicine	§19	103
49	Nuclear medicine water supply and wastewater engineer	§20	105
50	Instrumentation and automation engineer in nuclear medicine	§21	107
51	Nuclear medicine technologist	§22	108
52	Medical physicist engineer	§23	110
53	Radiation equipment maintenance engineer	§24	111
54	Clinical embryologist	§25	112
	Positions for employees with post-secondary medical education	-	114
55	Nurse (male nurse) of advanced practice	§ 1	114
	Positions for employees with technical and vocational medical education, education in the sanitary and epidemiological profile	-	116
56	Paramedic	§ 1	116
57	Obstetrician (midwife)	§ 2	117
58	Nurse (male nurse) district, and (or) nurse (male nurse) of general practitioner	§ 3	119
59	Nurse (male nurse) ( specialized)	§ 4	120
60	Nurse (male nurse) of a medical centre in educational organizations	§ 5	122
61	Dietary nurse	§ 6	123
62	Dental hygienist	§ 7	124
63	Dentist	§ 8	126
64	Dental assistant	§ 9	126

65	Dental technician ( laboratory assistant in the dental prosthetics department, office)	§ 10	128
66	Medical laboratory technician	§ 11	129
67	X-ray technician	§ 12	130
68	Optician and optometrist	§ 13	131
69	Physical therapy instructor	§ 14	132
70	Medical registrar	§ 15	133
71	Assistant epidemiologist	§ 16	134
72	Laboratory assistant of sanitary and epidemiological profile	§ 17	135
73	Disinfection instructor	§ 18	137
74	Social worker in the field of healthcare	§ 19	138
75	Nurse (male nurse) junior	§ 20	139
76	Medical massage therapist	§ 21	140
77	Senior medical laboratory assistant	§ 22	141
78	Radioisotope (radionuclide ) diagnostics laboratory technician	§ 23	142
79	Nurse and/or male nurse of radiation equipment (radiotherapy technologist)	§ 24	144
	Positions of employees with technical and vocational pharmaceutical education	-	145
80	Pharmacist	§ 1	145
	Junior staff positions	-	147
81	Senior (nurse)	§ 1	147
	Positions of employees with technical and vocational non-medical education	-	148
82	Laboratory assistant for quality control of radiopharmaceutical drugs	§ 1	148
83	Nuclear medicine instrumentation and automation technician	§ 2	149
84	Nuclear medicine HVAC technician	§ 3	150

85	Nuclear medicine water supply and wastewater technician	§ 4	152
86	Dosimetrist technician in the field of sanitary and epidemiological service		154
87	Assistant entomologist (zoologist)	§ 6	155

Appendix 2 to the qualification characteristics of positions of employees of the healthcare system

# A list of positions of employees provided for in this directory, indicating their titles according to previously valid qualification characteristics of positions of employees of the healthcare system

Footnote. Appendix 2 is in the wording of the Order № 66 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated 16 July 2025 (shall enter into force upon expiration of ten calendar days after its first official publication).

Nº 1	The titles of the positions of managers and specialists in the previously existing qualification characteristics  2  Management		
1	positions  Head of the organization (CEO, director) of healthcare organizations of republican, regional, district, and city significance, and (or) healthcare organizations implementing informatization in the field of healthcare, and (or) organizations of republican significance in the field of circulation of	positions  The head of the organization (CEO, director) of healthcare organizations of republican, regional, district and city significance, and (or) healthcare organizations implementing informatization in the field of healthcare and (or) organizations of republican significance in the field of circulation of medicines and medical devices, and (or) healthcare organizations	

	medicines and medical devices	operating in the field of sanitary and epidemiological welfare of the population, nuclear medicine	
2.	Deputy head (CEO or director) of a healthcare organization (for medical affairs, for quality control of medical services, for strategic development, for organizational and methodological work, for anti-epidemic work) or a healthcare organization implementing informatization in the field of healthcare or an organization in the field of circulation of medicines and medical devices;	Deputy head (CEO or director) of a healthcare organization (for medical affairs, for quality control of medical services, for strategic development, for organizational and methodological work, for anti-epidemic work) or a healthcare organization implementing informatization in the field of healthcare and (or) an organization in the field of circulation of medicines and medical devices and (or) a healthcare organization operating in the field of sanitary and epidemiological welfare of the population (for sanitary and epidemiological work)	
3.	Deputy head (CEO or director) of a healthcare organization for economic and administrative support	Deputy head (CEO or director) of a healthcare organization for economic and administrative support	
		The head of a structural unit of a healthcare organization (senior physician, head of a clinical (paraclinical) unit (department),	

4.	male nurse (senior paramedic, senior obstetrician), nursing manager, head of a laboratory of a sanitary and epidemiological	head of a department, senior nurse, senior male nurse (senior paramedic, senior obstetrician), nursing manager, head of a laboratory of a sanitary-epidemiological service organization, head of a vivarium of a sanitary-epidemiological service organization, head of a microbiological laboratory of an organization in the field of sanitary-epidemiological welfare of the	
	service organization, head of a vivarium of a sanitary and epidemiological service organization)	population, head of the department for receiving and collecting samples in a sanitary-epidemiological service organization, head of the department of sanitary-epidemiological and laboratory analytics, head of the department of metrology and technical maintenance in the field of sanitary-epidemiological service	
5.	Deputy director of nursing	Deputy director of nursing	
6.	Head nurse	Head nurse	
-	Positions for specialists with higher and postgraduate medical education	Positions for specialists with higher and postgraduate medical education, education in the field of public health and healthcare	

7.	District doctor and (or) general practitioner	District doctor and (or) general practitioner	
8.	Doctor (specialist)	Doctor (specialist)	
9.	Medical expert	Medical expert	
10.	Forensic medical expert (general expert, forensic biological, chemical-toxicological, forensic histological, medical-criminalistic, molecular-genetic research)	Forensic medical expert (general expert, forensic biological, chemical-toxicological, forensic histological, medical-criminalistic, molecular-genetic research)	
11.	Forensic medical expert (forensic biological, chemical-toxicologic al, forensic histological, medical-criminalistic, molecular-genetic research)	Forensic medical expert (forensic biological, chemical-toxicologic al, molecular genetic research)	
12.	absent	Doctor - transplant coordinator	
13.	resident physician	Resident physician	
14.	absent	Intern doctor	
15.	absent	Healthcare manager ( for the quality of medical services, for the strategy and marketing of medical services, for the organization and methodology of providing medical services, for personnel (HR manager)	
16.	Doctor and/or public health specialist ( valeologist, epidemiologist, statistician, methodologist)	Doctor and/or public health specialist ( valeologist, epidemiologist, statistician, methodologist)	
17.	Doctor (or specialist) of the sanitary and epidemiological service	Doctor (or specialist) of the sanitary and epidemiological service	
	Senior nurse or male nurse (senior	Senior nurse (male nurse) (senior	

paramedic, senior obstetrician)	paramedic, senior obstetrician)		
absent	Auditor, sanitary and epidemiological service		
Absent	Biosafety specialist in a sanitary and epidemiological service organization		
absent	Sampling and reception specialist*		
Absent	VAD Coordinator ( Specialist in mechanical circulatory support)		
Positions of employees with higher and postgraduate pharmaceutical education	Positions of employees with higher and postgraduate pharmaceutical education		
Pharmacist (pharmacist)	Pharmacist (pharmacist)		
absent	Radiopharmacist		
Engineer-technologis t for the production of medicines and medical devices	Engineer-technologis t for the production of medicines and medical devices		
absent	Clinical pharmacist		
absent	Quality management manager in pharmacy		
absent	Inspector		
Absent	S e n i o r radiopharmacist		
Positions for specialists with higher non-medical education	Positions for specialists with higher non-medical education		
Laboratory specialist	Laboratory specialist		
Specialist in the field of sanitary and epidemiological services (biologist, zoologist or epizootologist, entomologist)	Specialist in the field of sanitary and epidemiological services (biologist, zoologist or epizootologist, entomologist)		
	Social work specialist in healthcare		
	absent  Absent  Absent  Positions of employees with higher and postgraduate pharmaceutical education  Pharmacist (pharmacist)  absent  Engineer-technologis t for the production of medicines and medical devices  absent  absent  Absent  Positions for specialists with higher non-medical education  Laboratory specialist  Specialist in the field of sanitary and epidemiological services (biologist, zoologist, entomologist)  Social work specialist	absent service  Absent service  Biosafety specialist in a sanitary and epidemiological service organization  absent Sampling and reception specialist*  VAD Coordinator (Specialist in mechanical circulatory support)  Positions of employees with higher and postgraduate pharmaceutical education  Pharmacist (pharmacist) absent Radiopharmacist  Engineer-technologis t for the production of medicines and medical devices absent Clinical pharmacist  absent Radiopharmacist  Engineer-technologis t for the production of medicines and medical devices absent Clinical pharmacist  Absent Positions for specialists with higher non-medical education  Positions for specialists with higher non-medical education  Laboratory specialist  Specialist in the field of sanitary and epidemiological services (biologist, zoologist or epizootologist, entomologist)  Social work specialists  Social work specialists  Social work specialist social work specialists or epizootologist, entomologist)  Social work specialist Social work specialists or epizootologist, entomologist)  Social work specialist Social work specialists	absent epidemiological service  Biosafety specialist in a sanitary and epidemiological service organization  absent Sampling and reception specialist*  VAD Coordinator (Specialist in mechanical circulatory support)  Positions of employees with higher and postgraduate pharmaceutical education education  Pharmacist (pharmacist) absent Radiopharmacist  Engineer-technologist t for the production of medicines and medical devices absent Clinical pharmacest absent Radiopharmacist  Desitions for specialists with higher non-medical education education  Positions for Specialist with higher non-medical education education  Laboratory specialist in the field of sanitary and epidemiological services (biologist, zoologist or epizootologist, entomologist)  Social work specialist Social work specialist such contologist, entomologist)  Social work specialist Social work specialist such contologist, entomologist)  Social work specialist Social work specialist such contologist, entomologist)  Social work specialist Social work specialist such contologist, entomologist)  Social work specialist Social work specialist such contologist, entomologist)

33.	Absent	Quality specialist in the field of sanitary and epidemiological service
34.	Absent	Quality manager in the field of sanitary and epidemiological service
35.	Absent	Biosafety specialist in a sanitary and epidemiological service organization
36.	Absent	Dosimetrist engineer in the field of sanitary and epidemiological service
37.	Absent	Service engineer in the field of sanitary and epidemiological services
38.	Absent	Medical psychologist
39.	Absent	Cyclotron engineer for the production of radiopharmaceuticals
40.	Absent	Radiochemist-technol ogist for the production of radiopharmaceutical drugs.
41.	Absent	Radiochemist-analyst for quality control of radiopharmaceutical drugs.
42.	Absent	Radiopharmaceutical drug quality assurance specialist.
43.	Absent	Engineer for servicing ventilation of facilities with open sources of ionizing radiation.
44.	Absent	Engineer for maintenance of systems for collection , storage and discharge of liquid radioactive waste.
45.	Absent	Radiation safety engineer.

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46.	Absent	Medical physicist.	
47.	Absent	Engineer for maintenance of process and medical gases in nuclear medicine.	
48.	Absent	HVAC engineer in nuclear medicine.	
49.	Absent	Nuclear medicine water supply and wastewater engineer.	
50.	Absent	Instrumentation and automation engineer in nuclear medicine.	
51.	Absent	Nuclear medicine engineer and technologist.	
52.	Absent	Engineer-medical physicist.	
53.	Absent	Beam equipment maintenance engineer .	
54.	Absent	Clinical embryologist	
	Absent	Positions for employees with post-secondary medical education	
55.	Nurse (male nurse) of extended practice	Nurse (male nurse) of advanced practice	
	Positions for employees with technical and vocational medical education	Positions for employees with technical and vocational medical education	
56.	paramedic	paramedic	
57.	Obstetrician	Obstetrician (midwife )	
58.	District (male nurse) and (or) general nurse (male nurse)	Nurse (male nurse) district and (or) nurse (male nurse) of general practitioner	
59.	Nurse (male nurse) ( specialized)	Nurse (male nurse) ( specialized)	
60.	Nurse and (or) male nurse of a medical centre in educational organizations	Nurse (male nurse) of a medical centre in educational organizations	
61.	Dietary nurse	Dietary nurse	
62.	Dental hygienist	Dental hygienist	

63.	Dentist	Dentist	
64.	Dental assistant ( dental assistant)	Dental assistant ( dental assistant)	
65.	,	Dental technician ( laboratory assistant in the dental prosthetics department, office)	
66.	Lab assistant	Medical laboratory technician	
67.	X-ray technician	X-ray technician	
68.	Optician and optometrist	Optician and optometrist	
69.	Physical therapy instructor	Physical therapy instructor	
70.	Medical registrar	Medical registrar	
71.	Sanitary paramedic ( assistant to a hygienist and epidemiologist, parasitologist, laboratory paramedic, laboratory assistant)	Assistant epidemiologist*	Помощник энтомолога (зоолога)
72.	Absent	Laboratory assistant of sanitary and epidemiological profile	
73.	Disinfection instructor	Disinfection instructor	
74.	Social worker in the field of healthcare	Social worker in the field of healthcare	
75.	Junior nurse (male nurse)	Junior nurse (male nurse)	
76.	Medical massage therapist	Medical massage therapist	
77.	Absent	Senior medical laboratory assistant	
78.	Absent	Radioisotope (radionuclide) diagnostics laboratory technician	
79.	absent	Nurse and/or male nurse of radiation equipment ( radiotherapy technologist)	
-	Positions of employees with technical and vocational	Positions of employees with technical and vocational	

	pharmaceutical education	pharmaceutical education	
80.	Pharmacist's assistant	Pharmacist	
-	Junior staff positions	Junior staff positions	
81.	Senior nurse	Senior (nurse)	
	absent	Positions for specialists with technical and professional non-medical education	
82.	absent	Laboratory assistant for quality control of radiopharmaceutical drugs	
83.	absent	Nuclear medicine instrumentation and automation technician	
84.	absent	Nuclear medicine HVAC technician	
85.	absent	Nuclear medicine water supply and wastewater technician	
86.	absent	Dosimetrist technician in the field of sanitary and epidemiological service	
87.	absent	Assistant entomologist (zoologist)	

Annex 4
to the order of the Minister
of Healthcare
of the Republic of Kazakhstan
dated December 21, 2020
№ RK HM-305/2020

#### List of some orders recognized as invalid of the Ministry of Health of the Republic of Kazakhstan

1. Order № 775 of the Minister of Healthcare of the Republic of Kazakhstan dated November 24, 2009 "On approval of the Nomenclature of positions of healthcare employees" (registered in the Register of state registration of regulatory legal acts № 5896, published in 2010 in the Collection of acts of central executive and other central state bodies of the Republic of Kazakhstan).

- 2. Order № 791 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated November 26, 2009 "On approval of qualification characteristics of positions of healthcare employees" (registered in the Register of state registration of regulatory legal acts № 5945, published in 2010 in the Collection of acts of central executive and other central state bodies of the Republic of Kazakhstan № 7).
- 3. Order № 774 of the Minister of Healthcare of the Republic of Kazakhstan dated November 24, 2009 "On approval of the Nomenclature of medical and pharmaceutical specialties" (registered in the Register of state registration of regulatory legal acts № 5885, published on December 8, 2009 by the "Legal Gazette" № 187 (1784)).
- 4. Order № 587 of the Minister of Healthcare of the Republic of Kazakhstan dated August 24, 2012 "On introduction of amendments to the order № 775 of the Minister of Healthcare of the Republic of Kazakhstan dated November 24, 2009 "On approval of the Nomenclature of positions of healthcare employees" (registered in the Register of state registration of regulatory legal acts № 7936, published on October 17, 2012 in the newspaper "Kazakhstanskaya Pravda" № 356-357 (27175-27176)).
- 5. Order № 588 of the Minister of Healthcare of the Republic of Kazakhstan dated August 24, 2012 "On introduction of amendments to the order № 791 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated November 26, 2009 "On approval of the qualification characteristics of positions of healthcare employees" (registered in the Register of state registration of regulatory legal acts under № 7937, published on November 7, 2012 in the newspaper "Kazakhstanskaya Pravda" № 385-387 (27204-27206)).
- 6. Subparagraph 1) of paragraph 1 of the order № 269 of the Minister of Healthcare of the Republic of Kazakhstan dated May 6, 2013 "On introduction of amendments and additions to certain orders of the Minister of Healthcare of the Republic of Kazakhstan (registered in the Register of state registration of regulatory legal acts № 8501, published on August 27, 2013 in the newspaper "Egemen Kazakhstan" № 198 (28137)).
- 7. Order № 436 of the Minister of Healthcare of the Republic of Kazakhstan dated July 26, 2013 "On introduction of amendments and additions to order № 791 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated November 26, 2009 "On approval of Qualification characteristics of positions of healthcare employees" (registered in the Register of state registration of regulatory legal acts under № 8683, published on December 26, 2013 in the newspaper "Kazakhstanskaya Pravda" № 344 (27618)).
- 8. Order № 147 of the Acting Minister of Healthcare of the Republic of Kazakhstan dated March 19, 2014 "On introduction of amendments to order № 775 of the Minister of Healthcare of the Republic of Kazakhstan dated November 24, 2009 "On approval of the Nomenclature of positions of healthcare employees" (registered in the state registration of regulatory legal acts under № 9359).
- 9. Order of the Minister of Healthcare and Social Development of the Republic of Kazakhstan dated June 13, 2016 № 500 "On introduction of amendments to order of the

Acting Minister of Healthcare of the Republic of Kazakhstan dated November 26, 2009 № 791"On approval of Qualification characteristics of positions of healthcare employees" (registered in the Register of state registration of regulatory legal acts under № 13839, published on July 13, 2016 in the Information and Legal System "Adilet").

- 10. Order of the Minister of Healthcare and Social Development of the Republic of Kazakhstan dated December 5, 2016 № 1036 "On introduction of amendments and additions to order of the Minister of Healthcare of the Republic of Kazakhstan dated November 24, 2009 № 774 "On approval of the Nomenclature of medical and pharmaceutical specialties" (registered in the Register of state registration of regulatory legal acts under № 14656, published on January 25, 2017 in the Reference Control Bank of regulatory legal acts of the Republic of Kazakhstan).
- 11. Order of the Minister of Healthcare of the Republic of Kazakhstan dated May 19, 2017 № 311 "On introduction of amendments to order of the Acting Minister of Healthcare of the Republic of Kazakhstan dated November 26, 2009 № 791 "On approval of Qualification characteristics of positions of healthcare employees" (registered in the Register of state registration of regulatory legal acts under № 15283, published on July 4, 2017 in the Reference Control Bank of regulatory legal acts of the Republic of Kazakhstan).
- 12. Paragraph 1 of the order of the Minister of Healthcare of the Republic of Kazakhstan dated August 28, 2017 № 660 "On introduction of amendments and additions to the orders of the Minister of Healthcare of the Republic of Kazakhstan dated November 24, 2009 № 774" On approval of the Nomenclature of medical and pharmaceutical specialties" and January 30, 2008 № 27 "On approval of lists of clinical specialties of training in boarding and residency" (registered in the Register of state registration of regulatory legal acts under № 15670, published on September 25, 2017 in the Reference Control Bank of regulatory legal acts of the Republic of Kazakhstan).
- 13. The order of the Minister of Healthcare of the Republic of Kazakhstan dated December 19, 2018 № KP DSM-43 "On introduction of amendments and additions in some regulatory legal acts of the Ministry of Healthcare of the Republic of Kazakhstan" (registered in the Register of the state registration of regulatory of legal acts at № 18043, published on January 3, 2019 in Reference control bank of regulatory legal acts of the Republic of Kazakhstan).
- 14. Order of the Minister of Healthcare of the Republic of Kazakhstan dated April 11, 2019 № RK HM-29 "On introduction of amendments to some orders of the Ministry of Healthcare of the Republic of Kazakhstan" (registered in the Register of state registration of regulatory legal acts under № 18522, published on April 18, 2019 in the Reference Control Bank of regulatory legal acts of the Republic of Kazakhstan).
- 15. Order of the Minister of Healthcare of the Republic of Kazakhstan dated December 19 , 2019 № RK HM-150 " On introduction of amendments to order of the Acting Minister of Healthcare of the Republic of Kazakhstan dated November 26, 2009 № 791" On approval of

Qualification characteristics of positions of healthcare employees" (registered in the Register of state registration of regulatory legal acts under № 19758, published on December 26, 2019 in the Reference Control Bank of regulatory legal acts of the Republic of Kazakhstan).

16. Order of the Acting Minister of Healthcare of the Republic of Kazakhstan dated June 22, 2020 № RK HM-70/2020 "On introduction of amendments and additions to some regulatory legal acts of the Ministry of Healthcare of the Republic of Kazakhstan (registered with the Ministry of Justice of the Republic of Kazakhstan on June 23, 2020 № 20887 in the Reference Control Bank of regulatory legal acts of the Republic of Kazakhstan).

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