Modern American Journal of Medical and Health Sciences
ISSN (E): 3067-803X
Volume 01, Issue 08, November, 2025
Website: usajournals.org

CORONAVIRUS DISEASE AND HYGIENE ASSESSMENT

Abdukadirova Lola Kabulovna
Tashkent, Uzbekistan

Abstract

The urgency of the problem is that the main symptoms of coronavirus disease are fever, cough, and shortness of breath, and the disease can cause pneumonia and acute respiratory distress in the patient. In the diagnosis of the disease, the computed tomography method of X-ray diagnostics has been and is being widely used. Hello this sick raw medicine for employee is it harmful for said question is born.

Computed tomography - X-ray methods the most high technology is considered. This mainly X - rays is used. Computed tomography when increased radiation in a simple X-ray method from radiation high is calculated: e.g lung radiography – 0.15 μZv, lung CT – 20 μZv). The world population between and doctor indication if not, repeat from repeat CT method use peak is taking. This and CT of the lungs to the human body of radiation high pressure bringing to produce possible, even coronavirus approved Although CT only doctor recommendation with to do condition because is counting. Scientists to his words according to, with COVID-19 sick for the sick average 2.5 μSv/s

CT is correct. is coming. According to scientific data, in March-June 2020, the mass radiation dose in Moscow, St. Petersburg and the Leningrad region increased by 1.5 times. This may lead to the development of radiation-related diseases in the future. This, in turn, will inevitably have a negative impact on radiologists and medical personnel who work with CT for a long time and without interruption.

Monitoring the health of employees who work with X-ray machines, which are widely used to diagnose patients, studying the specific and nonspecific factors affecting their bodies, and creating optimal conditions for their work are among the most important and urgent problems of our time.

Modern American Journal of Medical and Health Sciences
ISSN (E): 3067-803X
Volume 01, Issue 08, November, 2025
Website: usajournals.org

The purpose of our work. Study and assessment of non-specific hygienic and specific radiation factors that affect the health of medical workers when using CT rays in the diagnosis and treatment of patients.

Tasks set to achieve the goal: Hygienic description of CT X-ray rooms in inspection facilities and study of microclimatic parameters of CT X-ray rooms, anthropogenic air pollution and lighting condition. It consisted in the analysis of the indicators of ionizing radiation dose (absorbed and equivalent) in the CT room.

Examination objects and materials . According to information received from the Tashkent City Sanitary Epidemiological and Public Health Service, currently there are 66 multispiral computed tomography devices in Tashkent, of which 29 operate in State Medical and Preventive Centers and 37 in private medical and preventive centers. The following CT X-ray devices are used in these medical and preventive centers:
CT «SOMATOM EMOTION Slice», SOMATOM ARTX, ST 728326 "Ingenuity Core", CT "Neu Viz 64i", CT "Eclos 8", CT "INGENVITY 128", Somatom Definition AS, CCX Digital Trophy, MSKT "Aquilion ONE GENESIS", MSCT "OPTIMA 660".
The X-ray diagnostic department of the private hospital "Shox Med Center" located in the Almazar district of Tashkent and the X-ray rooms of the central polyclinic "Uzbekistan Railways" were selected to conduct scientific research. Both institutions are located in buildings built in a modern style, based on a standard project that meets all requirements.
Nonspecific hygienic factors to study and assessment methods. Every of two DPM CT X-ray rooms main and of auxiliary room air nonspecific hygienic factors (microclimate, illumination level, anthropogenic air pollution) special tools with the help of studied and taken results SanPiN №0292-11 "Sanitary norms and rules of designing construction and exploitation of medical facilities". with compared.

Modern American Journal of Medical and Health Sciences
ISSN (E): 3067-803X
Volume 01, Issue 08, November, 2025
Website: usajournals.org

In the territory of the inspected object ionizer light dose power inspection method. Every a computed tomography x-ray department within the territory ionizer radiation dose rate - absorbed dose rate - Ray Safe dosimetric control tool using, the equivalent dose power and - polymaster personal dosimetric control tool with the help of determined and taken results
With number Q and M No. 0194-06 compared.

Taken results analysis and Conclusion: The following deficiencies were identified in the X-ray rooms at the facilities where the research was conducted: It was found that there were no lead aprons to protect employees at the Uzbek Railways State Radiological and Medical Research Institute.
In both facilities, the microclimate indicators in the main workplaces of employees do not meet the requirements of SanPiN No. 0292-11: in the summer months, the air temperature in the main rooms is 1.5-5.9°C higher, humidity is high (by 5-21%), and the air velocity is low (up to 0.14-0.01 m/s); in the cold months of the year, the room temperature is 5-7°C lower than the hygienic norm, and humidity is 13-30% higher than the norm.
It was observed that the X-ray rooms of both DPMs are prone to anthropogenic pollution (1.2%). The level of natural lighting in both DPMs does not meet the required hygienic standards, for example, in the treatment rooms of the X-ray departments of both inspected facilities, the LIGHT is zero (-1.5% of the norm), that is, there are no windows, the general lighting level is 130±20 lux - 150±20 lux within the norm (200 lux).
The specific factor indicators at the studied facilities, that is, the ionizing dose rate within the facility, did not exceed the permissible level.
In both DPMs, the annual personal radiation doses of X-ray department employees do not exceed the RAD (RAD – 20 mSv/year).

References

1. Абдукадирова, Л. К. (1999). Бир ёшгача бўлган болалар соғлиқ холатига ижтимоий-гигиеник ва экологик омилларнинг таъсири. кандидатлик диссертацияси. кандидатлик диссертацияси.

Modern American Journal of Medical and Health Sciences
ISSN (E): 3067-803X
Volume 01, Issue 08, November, 2025
Website: usajournals.org

2. Абдукадирова, Л. К. (2017). Соғлом турмуш тарзининг гигиеник асослари. Фан ва техника тараққиѐтида хотин-қизларнинг ўрни. Республика илмий-амалий анжумани маърузалар тўплами.
3. Абдукадирова, Л. К. Она ва бола саломатлиги-миллат соғлиги. Тиббий таълимда инновацияларни қўллаш ва интеграл маърузаларни такомиллаштириш-2016 С96-97, 3.
4. Абдукадирова, Л. К., & Абдуллаева, Ў. Я. (2019). Тошкент шаҳри кичик ёшдаги болалар тарбияланаётган оилаларнинг ижтимоий-гигиеник холатини ўрганиш натижалари. Интернаука, (5-2), 47-48.
5. Абдукадирова, Л. К., & Абдурахмонов, Б. О. (2019). РАДИОЛОГИЯ БЎЛИМИ ХОНАЛАРИДАГИ НУРЛАНИШ ДОЗА ДАРАЖАСИНИ АНИҚЛАБ БАХОЛАШ. Интернаука, (3-3), 30-31.
6. Абдукадирова, Л. К., & Умирбеков, О. Д. (2020). Даволаш профилактика муассасалари радиология бўлими хоналаридаги нурланиш доза даражасини аниқлаб баҳолаш. Интернаука, (2-2), 68-69.
7. Абдукадирова, Л. К., Турсинбаев, А. А., & Халиуратов, Б. З. (2021). ЭКОЛОГИК МУАММОЛАР-ИЖТИМОИЙ СИЁСАТНИНГ АЖРАЛМАС ҚИСМИ. Интернаука, (1-3), 36-37.
8. Абдукадырова, Л. К., Иброхимова, Д. И., & Гуломова, Ш. Х. (2023). ВЛИЯНИЕ БЕССОННИЦЫ НА ПСИХОЭМОЦИОНАЛЬНОЕ СОСТОЯНИЕ СТУДЕНТОВ. In Proceedings of International Conference on Educational Discoveries and Humanities (Vol. 2, No. 3, pp. 151-155).
9. Ахмадалиева, Н. О., Саломова, Ф. И., Садуллаева, К. А., Абдукадирова, Л. К., & Имамова, А. О. (2024). ИЗЪЯТО: Питание часто болеющих детей дошкольного возраста в организованных коллективах. В BIO Web of Conferences (т. 84, стр. 01011). EDP Sciences.
10. Аҳмадалиев, Ю. И., & Комилова, Н. Ў. (2020). Этноэкологик маданиятнинг ҳудудий жиҳатлари.
11. Закирходжаев, Ш. Я., Жалолов, Н. Н., Абдукадирова, Л. К., & Мирсагатова, М. Р. (2023). ЗНАЧЕНИЕ ПИТАНИЯ ПРИ ХРОНИЧЕСКИХ ГЕПАТИАХ.

Modern American Journal of Medical and Health Sciences
ISSN (E): 3067-803X
Volume 01, Issue 08, November, 2025
Website: usajournals.org

12. Salomova, F. I., Mavlonov, A., & Abdukadirova, L. K. (2024). Talabalar o'rtasida gastritning tarqalishi va to'g'ri ovqatlanishning ahamiyati.
13. Sharipova, S. A., & Ikramova, N. A. (2024). CONSEQUENCES OF NOT BREASTFEEDING FOR THE MOTHER AND INFANT. Web of Medicine: Journal of Medicine, Practice and Nursing, 2(12), 273-276.
14. Sharipova, S. A., Ikramova, N. A., Bahriddinova, M. N., Toshpulatov, B. M., & Egamberdiyeva, Z. Z. (2025, March). SPECIFIC ASPECTS OF PREVENTION OF INFECTIOUS DISEASES. International Conference on Advance Research in Humanities, Applied Sciences and Education.
15. Ikramova, N. A., Jalolov, N. N., Mirsagatova, M. R., Kasimova, K. T., Sadirova, M. K., & Sultonov, E. Y. (2025, April). AMBIENT TEMPERATURE AND THE RISK OF THERMOREGULATORY DISORDERS AMONG TRAFFIC POLICE OFFICERS: AN EPIDEMIOLOGICAL ANALYSIS. International Conference on Advance Research in Humanities, Applied Sciences and Education.
16. Икрамова, Н.А., Мирсагатова, М.Р., Джалолов, Н.Н., Касимова, К.Т., Султонов, Э.Ю., и Садирова, М.К. (2025, апрель). ВЛИЯНИЕ ТЕПЛОВОЙ НАГРУЗКИ НА ОРГАНИЗМ РАБОТНИКОВ, РАБОТАЮЩИХ НА ОТКРЫТОМ ВОЗДУХЕ: АНАЛИЗ ПО МЕДИКО-ГИГИЕНИЧЕСКИМ ПОКАЗАТЕЛЯМ. Международная конференция по перспективным исследованиям в области гуманитарных, прикладных наук и образования.
17. Sadullaeva, K. A., Sadirova, M. Q., Ikramova, N. A., & Sotivoldieva, S. A. (2025). EFFECT OF NUTRITION ON HEALTH OF SCHOOL STUDENTS.
18. Мирсагатова, М. Р. (2017). Особенности трудового процесса при производстве хрусталя. Молодой ученый, (1-2), 34-35.
19. Niyazova, O. A., & Mirsagatova, M. R. (2024). THE STUDY OF RISK FACTORS FOR THE DEVELOPMENT OF CARIES IN PUPILS OF THE FIRST GRADES IN SECONDARY SCHOOLS.