



## VACCINATION AGAINST CORONAVIRUS INFECTION IN FERGANA REGION FOR THE PERIOD 2021-2022

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<b>Received:</b> December 11 <sup>th</sup> 2022 <b>Accepted:</b> January 11 <sup>th</sup> 2023 <b>Published:</b> February 20 <sup>th</sup> 2023	Immunization is one of the key components of primary health care, and the right to immunization is an inalienable human right. Vaccines are also crucial for preventing and suppressing outbreaks of infectious diseases. They are at the heart of global health security and will remain a vital tool in the fight against antimicrobial resistance
<b>Keywords:</b> vaccination, booster, pandemic, Ferghana region.	

The 2019 coronavirus disease (Covid-19) pandemic has claimed about 15 million lives worldwide. The rapid development of several Covid-19 vaccines has been a triumph for biomedical research, with billions of doses of the vaccine being administered around the world. Existing vaccines may not provide sustained high levels of protection against omicron challenge or transmission, even after multiple booster vaccinations and after the introduction of updated omicron-specific vaccines. Thus, recommendations for booster therapy should consider not only peak neutralizing antibody titers, but also long-term prevention of severe Covid-19 disease. Such protection is likely to require a combination of humoral and cellular immunity, with an emphasis on long-term rather than short-term immune response. However, to date, the research area has mainly focused on short-term neutralizing antibody responses. Revaccination plans should be based on sound scientific evidence that shows a significant and sustained improvement in the prevention of serious illness, and not on a short-term increase in neutralizing antibody titers. Ideally, Covid-19 boosters should be recommended no more than once a year, and preferably less frequently, and a variety of booster options should be available to the public. The use of vaccine platforms with increased durability is highly desirable.

In the Ferghana region, for the entire period of the pandemic until October 2022, 2,171,208 people (67.9%) over 18 years of age were vaccinated, 1,641,024 people (76%) received a full course, 1,582,485 (96.4%) received a booster dose. Of these, people over 50 years of age accounted for 93.3%, medical workers - 92.8%, teachers - 76.2%, employees of preschool institutions - 81.1%, people with chronic diseases - 65.7%, other 52.8% .

131,146 children aged 12 to 18 were vaccinated, of which only 53,203 received a booster dose, which is 40.6%.

If we consider in the context of cities and districts of the Fergana region, out of all 67.9% of people over 18

years of age covered by vaccination, the largest percentage falls on the districts of Uzbekistan 80.3%, Altyrk 77.8%, Sokh 77.7%. The smallest number of vaccinated is in the city of Ferghana - 57.4%, Buvaïdu district - 54.6%.

In children from 12 to 18 years old, low rates of booster vaccination in the districts of Tashlak 13.2%, Uchkuprik 13.1%, the city of Kuvasay were not vaccinated among children.

The percentage of different types of vaccines: the total number of vaccinated 1641024 persons, of which 129050 persons were vaccinated with the Astra Zeneka vaccine (7.9%), 176759 persons were vaccinated with the Pfizer vaccine (10.8%), 956450 persons were vaccinated with the ZF-UZvac vaccine (58.2%). %), 149,184 persons were vaccinated with the Moderna vaccine (9.1%), 136,200 persons were vaccinated with the Sinovac vaccine (8.3%), 174,065 persons were vaccinated with the Sputnik vaccine (4.5%), 193,166 persons were vaccinated with the Sputnik light vaccine (1.2% ).

### CONCLUSIONS:

In some regions of the region, booster vaccination among people over 50 years old, employees of preschool institutions, people with chronic diseases does not reach 50%, among the rest of the population, the indicator of the region is 52.8%.

Booster vaccination among children aged 12-18 was carried out only by 40.6%, and in the city of Kuvasay it was not carried out at all, which leaves the risk of possible outbreaks of coronavirus among the child population, with the possibility of epidemic outbreaks in certain regions.

Although vaccination rates in the Ferghana region are close to the 70% threshold, and booster vaccination in the region is 96.4% to achieve herd immunity, attention should be paid to the low percentage of vaccination of children 12-18 years old, as well as the general population.



In some districts of the Fergana region, vaccination coverage does not reach 70% of the threshold for creating herd immunity, which leaves the risk of epidemic outbreaks in these regions.

The data of the statistical report for the period 2021-2022 allow us to draw the following conclusion: the promotion of vaccination is a priority task for every medical worker. It is necessary to increase medical literacy about the benefits and effectiveness of vaccines, to warn the public about the dangers of anti-vaccination campaigns that are widely distributed on the Internet.

#### **LIST OF SOURCES USED:**

1. Mamatkulova Mahbuba //To Study Motion of the Grain Mixture on Sieve Surface// INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN SCIENCE, ENGINEERING AND TECHNOLOGY. Volume 7, Issue 3, March 2020.
2. Маматкулова Махбуба Тожиалиевна //Изучение многолетней динамики заболеваемости вирусным гепатитом А и оценить эффективности вакцинации// «ИНТЕРНАУКА» Научный журнал № 15(144) Апрель 2020 г. Часть 1. 53стр
3. Makhbubakhon Tojialievna Mamatkulova //Determination of Susceptibility of Bacterial Infections to Antibiotics and Prevention of Nosocomial Infections// International Journal of Advanced Science and Technology. Vol. 29, No. 9s, (2020), pp. 4278-4282.
4. Рузиева Ёркиной Равшановна, Каримов Азизбек Равшанбекович //Факторы, предрасполагающие к развитию рака шейки матки среди женщин Ферганской области за период 2017-2021гг// Международный научно-практический журнал "Интернаука". Вып №12 (235) 2022. 31-32 стр.
5. M.T.Mamatqulova, Y.R.Rosibayeva, S.T.Yulchieva, H.A.Rakhimova //Pregnancy During a Pandemic of Coronavirus Infection Covid-19 Risks and Effects on the Unborn Child// 2023 International Conference February 19-23, San Francisco, CA. record number #4222350
6. Parpieva Odinoxon Rakhmanovna //Nutrition and diet in breast cancer// Texas Journal of Medical Science. Vol. 7. 04-2022. 27-30 page.
7. Odinoxon Raxmanovna Parpiyeva, Eleonora Topvoldievna Mirzajonova // The role of psycho-oncology in the treatment of cancer patients// Texas Journal of Medical Science. Vol. 9. 06-2022. 14-17 page.
8. O.Parpiyeva, A.Ostonaqulov //Psychology of patients with oncological diseases// International Scientific Journal ISJ Theoretical & Applied Science 06 (74) 2019. Philadelphia, USA. 642-645 page.
9. Parpieva Odinoxon Rakhmanovna, Ostonaqulov Alijon Dadajon Ugli //Modern Scientific Research In Oncological Diseases// *The American Journal of Medical Sciences and Pharmaceutical Research*, 3(03) 2021, 117-121стр
10. Parpieva Odinoxon Rakhmanovna, Ostonaqulov Alijon Dadajon Ugli, //Mental-emotional Disorders in Patients with Oncological Disiases// EPRA International Journal of Multidisciplinary Research (IJMR). Volume: 7/ Issue: 4/ April 2021. 232-235 page.
11. O.Parpiyeva, A.Ostonaqulov //Drugs to treat the psychological state of the patients and their methods// Международном научно-практическом журнале "Экономика и социум". Выпуск №1 (56) – 2019. 93-97 page
12. O.R Parpiyeva, Ostonaqulov A.D //Thoughts that do not go away from the brain// Международный научно-практический журнал "Мировая наука". Выпуск № 6 (27) – 2019. 9-12 стр
13. O.R Parpiyeva, Ostonaqulov A.D //Health theory// Международный научно-практический журнал "Форум молодых ученых". Вып №6 (34) 2019. 26-29 page
14. Mamatkulova Makhbuba Tojalievna //THE ROLE OF CYTOGENETIC STUDIES IN CLINICAL MEDICINE// ACADEMICIA: An International Multidisciplinary Research Journal. Vol. 11 Issue 1, January 2021.
15. Makhbuba Mamatkulova // Early Prenatal Diagnosis And Prevention Of Birth Damage Development In Children (Spina Bifida - A Defect In The Development Of The Nervous System)// The American Journal of Medical Sciences and Pharmaceutical Research. Vol. 03. Issue 04-16. April 30, 2021. 117-126 pages.
16. Makhamad Tojalievich Toshboltaev1, Makhbuba Mamatkulova //NORMATIVE METHOD FOR THE SUBSTANTIATION OF THE COMPOSITION AND QUANTITY OF MACHINES REQUIRED FOR 1000 HECTARES OF COTTON FIELD IN THE CONDITION OF ZBEKISTAN//



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International Journal of Agriculture,  
Environment and Bioresearch. Vol. 06, No. 01;  
2021. Page 68

17. Маматқулова Махбубахон Тожиалиевна  
//Фекал орал механизм билан юқувчи ичак  
инфекцияларининг эпидемиологик  
тахлили// Журнал «Студенческий вестник»  
№ 17 (67), часть 4, 2019 г 7.