

Rwanda COVID-19 Vaccination Program Implementation

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INTRODUCTION

With more than 118.3 million cases and more than 2.6 million deaths from coronavirus disease 2019 (COVID-19) worldwide [1] and more than 20,000 total cases and 275 deaths in Rwanda, efforts have been made to ensure global and non-discriminatory access to the vaccine [2]. COVID-19 vaccines help develop immunity to the virus that causes COVID-19 by making the human body produce memory T-lymphocytes and B-lymphocytes [3] that will remember how to fight that virus when attacked and effectively eliminate the viruses [4].

As vaccination campaigns are underway in different countries, as of 9 March 2021, 300 million vaccine doses have been administered [1]. Rwanda was not left behind in the fight against the pandemic and is among the first African countries to have started the COVID-19 vaccination campaign [5,6].

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Received: February 28, 2021

Accepted: March 27, 2021

Published: March 31, 2021

Cite this article as:

Nsanzabaganwa et al. Rwanda
COVID-19 Vaccination Program
Implementation. *Rw. Public
Health Bul.* 2021. 3 (1): 07-9.

COVID-19 VACCINATION PROCUREMENT

Towards the end of 2020, the Government of Rwanda had already applied for different vaccines, including Pfizer/BioNTech, Moderna and AstraZeneca vaccines, among others and had also submitted all required documents to COVAX, a framework aimed to ensure equitable access and fair allocation of COVID-19 health products [7]. Rwanda ordered 1 million doses of COVID-19 vaccines in its first emergency phase of vaccination. The primary beneficiaries are people at high risk, such as health professionals, people with comorbidity, and the elderly with 65 years and above [6,7]. Rwanda set up infrastructures such as procuring ultra-cold freezers and containers for each of the 4 provinces for proper

storage and distribution of vaccines. Facilities for easy transport, protocols, and personnel were prepared for better roll outs of COVID-19 vaccination campaigns [6,8]. Rwanda received the first batch of 1,000 COVID-19 vaccine doses in mid-February 2021 from Moderna [8]. On 3 March 2021, Rwanda received 240,000 doses of the AstraZeneca-Oxford and 102,960 doses of the Pfizer vaccine through the COVAX initiative. It became the first African country to use the Pfizer vaccine (Figure 1) [9,10]. Other 50,000 more doses donated by India were also received [11].

NATIONAL COVID-19 VACCINE ROLLOUT

Rwanda started the emergency phase of COVID-19 vaccination with 1,000 COVID-19 vaccine doses

Potential Conflicts of Interest: No potential conflicts of interest disclosed by all authors. **Academic Integrity:** All authors confirm their substantial academic contributions to development of this manuscript as defined by the International Committee of Medical Journal Editors. **Originality:** All authors confirm this manuscript as an original piece of work, and confirm that has not been published elsewhere. **Review:** All authors allow this manuscript to be peer-reviewed by independent reviewers in a double-blind review process. © **Copyright:** The Author(s). This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY-NC-ND), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. **Publisher:** Rwanda Health Communication Centre, KG 302st., Kigali-Rwanda. Print ISSN: 2663 - 4651; Online ISSN: 2663 - 4653. **Website:** <https://rbc.gov.rw/publichealthbulletin/>

from Moderna that were immediately administered to the frontliners [4].



Figure 1: Rwanda health minister, Dr Daniel Ngamije (third from left) receiving COVID-19 Vaccines through COVAX at Kigali International Airport (Adapted from WHO Africa [News](#), 3 March, 2021).

In this phase, people at high risk are vaccinated for free (Figure 2A) [9]. These include healthcare professionals, community health workers, people with disabilities, people with comorbidities, the elderly 65 years and above, prisoners, taximoto and cab drivers, airport staff, traders and security guards [8,10,11].

Rwanda national vaccine plan also covers all refugees and asylum-seekers who live in Rwanda [11] and, by 12 March 2021, refugees who work for health services across the six refugee camps in Rwanda and all adult refugees at the Gashora Emergency Transit Mechanism center were vaccinated (Figure 2B) [12].

By 12 March 2021, Rwanda had vaccinated over 249,000 people countrywide against coronavirus, a week since the vaccination campaign launch [13]. Rwanda's government continues negotiations with partners, including international organizations and other governments, to acquire additional vaccines

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Figure 2: A) A nurse receiving her COVID-19 vaccination (Adapted from RBC.gov.rw, 13 March 2021). B) A refugee receiving his COVID-19 vaccination at the Gashora Emergency Transit Mechanism center, Rwanda (Adapted from UNHCR [News](#), 12 March 2021).

to cover more people [10] with the plan to vaccinate 8 million people in 2 years [8].

In conclusion, getting vaccinated is one of many preventive measures against the COVID-19 pandemic. Vaccination is the only solution available to protect oneself and others and eradicate the pandemic. Vaccines enable the immune system to be ready to fight the virus causing COVID-19. It takes some weeks for the body to produce enough antibodies to fight the disease. Therefore, if vaccinated with the first dose, preventive measures and precautions should be maintained till some weeks after receiving the second dose, which marks complete vaccine against COVID-19.

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