Why did Ghana switch to a different rotavirus vaccine?





In 2020, Ghana switched from using ROTARIX® to ROTAVAC® in its national immunization program. PATH worked with Ghana Health Service and the University of Ghana to analyze the economic implications of this switch. This fact sheet is part of a series on key results of these analyses, collectively providing a case study on Ghana's rotavirus vaccine product switch. (*Manuscript pending submission to a peer-reviewed journal.*)

Background

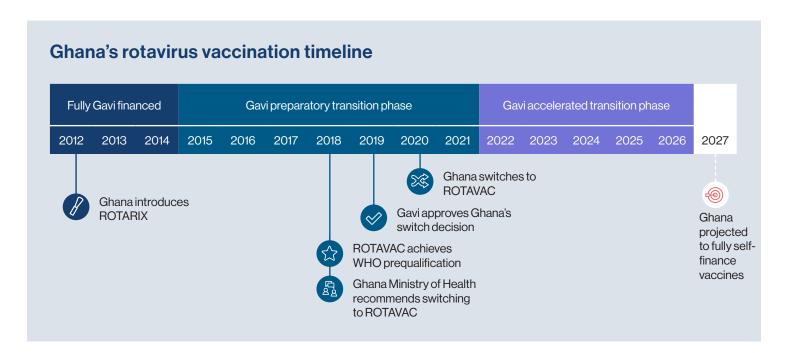
Rotavirus is the leading cause of severe diarrheal disease in infants and young children worldwide. Vaccination is the best way to protect children from rotavirus and the deadly, dehydrating diarrhea that it can cause. The World Health Organization (WHO) has recommended universal rotavirus vaccination for infants in all countries since 2009. ROTARIX was WHO-prequalified and became globally available the same year.

Ghana introduced ROTARIX into its routine immunization program with support from Gavi, the Vaccine Alliance, in 2012. It was one of the first African countries to do so. The rotavirus vaccination program in Ghana has been hugely successful and has maintained high coverage rates, with more than 90 percent coverage since 2014.

In 2018, the rotavirus vaccine market began expanding with new, lower-cost vaccines receiving WHO prequalification. One of these is ROTAVAC, made by Bharat Biotech, India.

A switch for sustainability

Gavi funding support is designed to be gradually decreased with a corresponding increase in country funding as national income and health system capacity increase and eventually transitioning to the country fully self-financing vaccines. Ghana has been in the Gavi preparatory transition phase since 2015. Since then, Ghana's co-financing contribution for vaccination programs has been increasing by 15 percent every year. In 2022, Ghana entered the accelerated transition phase, which requires the country to quickly ramp up its contributions to fully self-finance all vaccines by 2027.



In 2018, Ghana's newly-formed National Immunization Technical Advisory Group (NITAG) began discussions with the Ministry of Health about the best evidence-based ways to sustain their successful routine vaccination coverage as the country gradually transitions away from Gavi support. The NITAG identified rotavirus vaccination as one area where they could make a preemptive change to prepare for the future. In 2019, the NITAG supported and endorsed the recommendation by the Ministry of Health to switch to using ROTAVAC in Ghana's immunization program. They had determined that ROTAVAC would better meet the country's needs, partly due to the vaccine's lower price and smaller cold chain volume per dose. Gavi received and approved the switch decision in 2019.

In 2020, health facilities in Ghana began gradually switching to administering ROTAVAC as districts used up their ROTARIX stock. Despite the COVID-19 pandemic, the switch was complete by the end of 2020. While Ghana – along with the rest of the world – faced challenges in maintaining routine infant immunization visits during the pandemic, the health facilities were able to continue administering rotavirus vaccines and successfully switch to ROTAVAC nationwide.

An educational opportunity for the African region and the world

Ghana was the second country in Africa to introduce ROTAVAC into its national immunization program and the first Gavi country to elect to switch to one of the more recently prequalified rotavirus vaccines. With more rotavirus vaccine options now available, many countries may be considering a switch to a different product that better meets their needs, including financial considerations for vaccine procurement.

Ghana's switch provided an opportunity to inform other countries in the region and globally about the economic implications of switching to a new rotavirus vaccine. Such information adds to a growing body of evidence on the cost and cost-effectiveness of rotavirus vaccine switches.

Learn more about Ghana's rotavirus vaccine product switch with the three other fact sheets in this series:



What did Ghana's switch to ROTAVAC require?



Was the switch from ROTARIX to ROTAVAC cost-saving for Ghana?



Did Ghana's switch to ROTAVAC free cold chain capacity?





