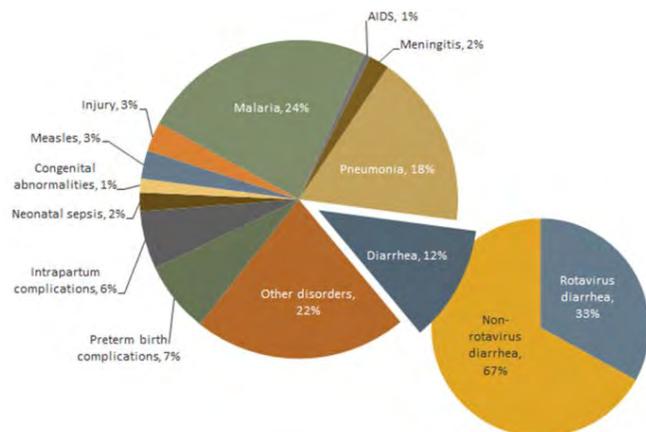


Rotavirus disease and vaccines in Burkina Faso

Diarrhea is a leading killer of children in Burkina Faso, causing approximately 12 percent of deaths in children less than five years of age.¹ Rotavirus, the most common cause of severe and fatal diarrhea in young children worldwide, takes the lives of more than 6,000 Burkinabé children less than five each year.^{2,3} It is estimated that 33 percent of all under-five diarrheal disease hospitalizations in Burkina Faso are caused by rotavirus,²⁻⁶ and nearly half of all rotavirus infections in Burkina Faso occur among children less than one year of age, the age during which rotavirus vaccines provide the greatest protection.⁶⁻⁸ Studies in Africa show that rotavirus vaccines are safe and effective against severe rotavirus disease and are cost-effective.⁷⁻⁹

On October 31, 2013, Burkina Faso will become the 16th GAVI-eligible country—and second sub-Saharan African francophone country—to introduce rotavirus vaccines in its national immunization program. The high burden of rotavirus disease in Burkinabé children, coupled with the power of rotavirus vaccines to prevent childhood deaths and hospitalizations, underscores the potential for Burkina Faso's introduction of rotavirus vaccines to save children's lives.

Causes of death in Burkinabé children <5 years, 2010^{1,4}



ROTAVIRUS IS THE LEADING CAUSE OF SEVERE AND FATAL DIARRHEA IN AFRICAN CHILDREN <5 YEARS OLD

Globally, rotavirus causes more than 450,000 deaths each year in children under five and is responsible for millions of hospitalizations and clinic visits.^{2,3,10} Nearly a quarter of a million African children die from the dehydrating diarrhea caused by rotavirus infection every year, accounting for more than 50 percent of the global total of rotavirus

deaths.^{2,3} The vast majority of countries with the highest child death rates from rotavirus (i.e., greater than 300 rotavirus deaths per 100,000) are in sub-Saharan Africa.^{2,3}

Burkina Faso Facts

Total population (2012)¹¹:	16,460,141
Population children <5 (2012)¹²:	2,931,980
Total live births (2012)¹²:	682,673
Mortality rate children <5 (2012)¹²:	102/1,000 live births
Total number <5 deaths (2010)¹:	123,343
Number of <5 deaths due to diarrhea (2010)¹:	14,648
Number of <5 deaths due to rotavirus (2008)²:	6,228

ROTAVIRUS TREATMENT AND PREVENTION STRATEGIES

Rotavirus is highly contagious and spreads from person-to-person through contaminated hands and objects. It cannot be treated with antibiotics or other drugs. Mild rotavirus infections can be treated in the same manner as other forms of diarrhea, by providing fluids and salts (oral rehydration therapy). However, children with severe rotavirus diarrhea often need intravenous fluids or they risk dying. In developing countries, this type of urgent health care is often inaccessible or unavailable, making rotavirus prevention through vaccination critical to saving lives.

Vaccination is the best way to prevent severe rotavirus disease and the deadly, dehydrating diarrhea that it causes. Improvements in water quality, hygiene, and sanitation stop bacteria and parasites that cause other forms of diarrhea but do not prevent the spread of rotavirus. Lifesaving rotavirus vaccines should be introduced as part of a comprehensive approach to control diarrhea, along with other interventions including oral rehydration therapy, breastfeeding, zinc treatment, and improvements in water and sanitation.

TWO SAFE AND EFFECTIVE ROTAVIRUS VACCINES ARE SAVING LIVES TODAY

There are currently two orally administered rotavirus vaccines available: Rotarix[®], manufactured by GlaxoSmithKline, and RotaTeq[®], manufactured by Merck & Co., Inc. Both vaccines have been shown to be safe and effective in large-scale clinical trials in Africa, Asia, Europe, Latin America, and the United States. Clinical trials in Africa found that rotavirus vaccines reduced severe rotavirus disease by more than 60 percent during the first year of life, when children are at greatest risk of severe rotavirus disease.^{7,8}

In June 2009, based in part on results from clinical trials in Africa (South Africa, Ghana, Kenya, Malawi, and Mali) demonstrating that rotavirus vaccines significantly reduced rotavirus disease in impoverished, high-mortality settings, the WHO Strategic Advisory Group of Experts recommended that rotavirus vaccines be included in all countries' national immunization programs.¹³ As of October 31, 2013, 48 countries have introduced rotavirus vaccines in their national immunization programs, including ten in Africa: Botswana, Burkina Faso, The Gambia, Ghana, Malawi, Morocco, Rwanda, South Africa, Sudan, and Tanzania. Seventeen additional countries in Africa have been approved by GAVI for rotavirus vaccine support: Angola, Burundi, Cameroon, Central Africa Republic, Republic of the Congo, Djibouti, Eritrea, Ethiopia, Guinea-Bissau, Kenya, Madagascar, Mali, Niger, Sierra Leone, Togo, Zambia, and Zimbabwe.¹⁴

Rotavirus vaccines are saving lives and improving health in countries where children have access to them. Swift and significant declines in hospitalizations and deaths due to rotavirus and all-cause diarrhea have been observed in many countries that have introduced rotavirus vaccines into their national immunization programs.¹⁵ Rotavirus vaccines may protect unvaccinated children and adults by reducing spread of rotavirus (an effect called herd immunity).¹⁶

In Burkina Faso, rotavirus vaccines will be launched concurrently with the pneumococcal conjugate vaccine. By introducing these vaccines together, Burkina Faso is taking a step forward in promoting the approach of the Integrated Global Action Plan for the Prevention and Control of Pneumonia and Diarrhea (GAPPD), which advocates for the introduction of both vaccines as part of a comprehensive and integrated strategy to combat diarrhea and pneumonia.¹⁷

ROTAVIRUS VACCINES ARE COST-EFFECTIVE AND A WISE INVESTMENT

Rotavirus vaccines are cost-effective, and in GAVI-eligible countries, where 95 percent of deaths due to rotavirus occur, more than 2.4 million child deaths can be prevented by 2030 by accelerating access to lifesaving rotavirus vaccines.⁸ If used in all GAVI-eligible countries, rotavirus vaccines could prevent an estimated 180,000 deaths and avert 6 million clinic and hospital visits each year, thereby saving US\$68 million annually in treatment costs.⁹

Rotavirus vaccines are an essential, lifesaving intervention in comprehensive diarrhea control. Accelerating access to

rotavirus vaccines will not only save the lives of Burkinabé children but also lessen the heavy economic and health burden of rotavirus disease, contributing to poverty reduction and economic growth. GAVI and its partners plan to support the introduction of lifesaving rotavirus vaccines in more than 30 of the world's poorest countries by 2015.

For more information on rotavirus disease and vaccines please visit <http://rotavirus.org>.

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