Diarrhea is a leading killer of children in Madagascar, causing approximately ten percent of deaths in children less than five years of age. Rotavirus, the most common cause of severe and fatal diarrhea in young children worldwide, takes the lives of more than 2,700 Malagasy children under five each year. It is estimated that one third of all under-five diarrheal disease hospitalizations in Madagascar are caused by rotavirus. Studies in Africa show that the rotavirus vaccines are safe and effective against severe rotavirus disease and are cost-effective.

In early 2014, Madagascar will introduce rotavirus vaccines into its national immunization program with GAVI support. The burden of rotavirus disease in Malagasy children, coupled with the power of rotavirus vaccines to prevent childhood deaths and hospitalizations, underscores the potential for Madagascar’s introduction of rotavirus vaccines to save children’s lives.

Causes of death in Malagasy children <5 years, 2010

Rotavirus is highly contagious and spreads easily from person-to-person through contaminated hands and objects. It cannot be treated with antibiotics or other drugs. Mild rotavirus infections can be treated effectively in the same manner as other forms of diarrhea, by providing fluids and salts (oral rehydration therapy). However, children with severe rotavirus diarrhea can become dehydrated and 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 children’s 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, exclusive breastfeeding, zinc treatment, and improvements in water and sanitation.

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 US. Clinical trials in Africa (South Africa, Ghana, Kenya, Malawi, and Mali) found that rotavirus vaccines reduced severe rotavirus disease by more than 60 percent during the first year of life, when children...
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 with rotavirus vaccines in their national immunization programs. Rotavirus vaccines may protect unvaccinated children and adults by reducing spread of rotavirus (an effect called herd immunity). Operationalizing GAPPD Approach in Madagascar

The integrated Global Action Plan for the Prevention and Control of Pneumonia and Diarrhea (GAPPD) is a plan to combat diarrhea and pneumonia together through prevention, protection, and treatment strategies. GAPPD advocates for the introduction of rotavirus and pneumococcal vaccines as part of a comprehensive strategy to control diarrhea and pneumonia. Madagascar introduced pneumococcal vaccines with GAVI support in 2012. With the addition of rotavirus vaccines, Madagascar is taking another step toward operationalizing the GAPPD approach and will be equipped with the tools to prevent deadly rotavirus diarrhea in young children.

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. 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. Rotavirus vaccines are an essential, lifesaving intervention in comprehensive diarrhea control. Accelerating access to rotavirus vaccines will not only save the lives of Malagasy 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.

REFERENCES