Investment Case
July 2018

THE CHALLENGE
Measles is one of the most contagious and deadly diseases ever known. In 2016 alone, it infected 7 million people,¹ with 95% of the cases occurring in low-income countries with weak health systems. Measles spreads much more easily than the flu or Ebola and other headline-grabbing diseases. It remains one of the leading causes of death in children worldwide, killing nearly 250 children per day – despite the fact that a safe and effective vaccine has been available for over 50 years. As we are reminded by recent outbreaks in Yemen, Syria, Bangladesh, and Italy measles anywhere is a threat everywhere.

While not as contagious as measles, rubella is an acute viral infection that is especially dangerous during pregnancy. Rubella can be passed from mother to her unborn child during pregnancy, resulting in multiple birth defects, including heart problems, deafness, blindness, and other lifelong complications with immeasurable emotional, social, and financial costs for families. Every year, 100,000 babies are born with CRS. It is the leading vaccine-preventable cause of birth defects.

Unlike many other leading causes of childhood disease and death, both measles and rubella are easily preventable with a low-cost, highly effective, combined vaccine. At less than $2 per dose, vaccinating a child against both measles and rubella is one of the best buys in global health. For every $1 invested in measles, the return is 58 times that in social and economic benefits.

Prevention of measles and rubella is far more cost-effective than managing the diseases, because of the tremendous socio-economic toll they impose. In Africa, medical costs associated with treating measles can equal one month of family income. The lifetime costs for chronic care per case of CRS can exceed $11,000 in low-income countries.

THE SOLUTION
Before the introduction of the measles vaccine in 1963, there were an estimated 2.6 million deaths per year. Measles vaccination resulted in an 84% drop in measles deaths between 2000 and 2016 worldwide² -- to a historic low of fewer than 90,000 measles deaths globally in 2016. The World Health Organization (WHO) estimates that measles vaccinations saved more than 20 million lives during the same time period.

¹ Source: http://www.who.int/immunization/diseases/measles/en/; accessed April 1, 2018
² Source: http://www.who.int/mediacentre/factsheets/fs286/en/; accessed April 19, 2018
Leading this successful effort is the Measles & Rubella Initiative (M&RI), a public-private partnership founded in 2001 by the American Red Cross, the U.S. Centers for Disease Control and Prevention, the United Nations Foundation, UNICEF, and the WHO. Combining the vaccination of children against measles as part of a country’s routine health system with supplemental, mass immunization campaigns as needed is key to reducing global measles deaths as countries build increasingly robust health systems. As the world’s leading experts on measles and rubella control and elimination, M&RI helps countries reduce cases of measles and rubella by:

- Providing technical assistance to help health officials build more robust routine immunization systems to give more children access to the measles-rubella and other lifesaving vaccines.
- Deploying technical experts as needed to assist in the implementation of high-quality supplemental immunization campaigns to reach missed populations.
- Providing financial and technical assistance to country surveillance systems so they can track cases of measles and rubella, and predict and minimize the harm caused by an outbreak.
- Mobilizing volunteers who go house-to-house at the village level to raise awareness about the importance of vaccines and inform local families of upcoming vaccination campaigns where their children can be vaccinated.
- Conducting post-campaign surveys to identify any missed children.
- Identifying and developing new tools, such as disease mapping technologies and easy-to-administer micro-needle vaccination patches, which will help countries successfully meet their measles and rubella immunization goals.
- Purchasing vaccines and responding to outbreaks.

M&RI’S IMPACT

![Number of Lives Saved by Measles Vaccine Globally](image)

Figure 1 Number of lives saved by measles vaccines globally, Source: WHO

$1 INVESTED IN MEASLES RESULTS IN $58 RETURN
M&RI’S GLOBAL REACH

Guided by the Global Vaccine Action Plan adopted by all WHO Member States, M&RI’s mandate extends to all 194 countries and to all who need immunization, regardless of age. Through a complementary partnership to ensure a coordinated global approach, M&RI works globally with all countries coordinating policy, guidelines, technical assistance and hosts regional reference labs worldwide. In low-income countries, M&RI does all these activities and also works closely with Gavi, the Vaccine Alliance, to dramatically decrease deaths caused by measles and the spread of CRS. Gavi is an innovative funding mechanism that helps low-income countries acquire vaccines to immunize children under 5 years of age against measles, rubella, and other vaccine-preventable diseases. M&RI provides the technical support to national governments to ensure Gavi investments are fully leveraged in the low-income countries eligible for Gavi support. With more than 50% of poor children in the world living in middle-income countries outside of Gavi’s scope, investing in M&RI expands vaccine coverage to a larger population and improves surveillance systems and health security in critical geographies.

THE OPPORTUNITY

To enable these activities, M&RI partner organizations have collectively raised and invested over $1.2 billion since the Initiative’s inception to support the immunization of over two billion children against measles and rubella.

Measles and rubella immunization activities are funded primarily by countries themselves. Where additional support is needed for a country to meet its immunization targets, M&RI steps up to assist.
M&RI estimates that a total of $215 million is needed to meet global and country targets and reach an average of 135 million children annually over the period 2018-2020. M&RI partner organizations and current donors have already committed to covering two-thirds of that cost, but a gap of $71 million remains – or an average of $23.5 million per year over the next three years. Partnering with M&RI helps ensure no child suffers disability or death from these vaccine-preventable diseases. Examples of opportunities include:

- **A $5 million investment** in M&RI will leverage the CDC’s $8.5 million annual contribution, to fill M&RI’s annual funding gaps for strengthening and building the surveillance systems necessary to track the spread of measles and rubella, mitigate the damage that would be caused by outbreaks, and strengthen global health security.
- **A $12 million investment** in M&RI will fill budget gaps and help strengthen routine immunization systems and redouble efforts to reach children who did not receive routine vaccination in their first years of life.
- **A $20 million investment** in M&RI over the next 3 years will supplement Gavi’s $10 million annual contribution for outbreaks in low-income countries and help immunize more than 20 million additional children against measles and rubella in outbreak and emergency situations in populations not eligible for Gavi’s support.
- **A $1.5 million investment** in M&RI will fill the annual funding gap for immediate R&D needs, including leveraging technologies to map disease endemicity and outbreaks as well as micro-needle patches and other innovations to improve delivery and efficiency and lower costs.

### 5 Reasons to Invest in M&RI

- **Unique Expertise** – M&RI’s network of thousands of the world’s leading experts in measles and rubella control and elimination provide the know-how to build country capacity, ensure quality vaccines and campaigns, strengthen surveillance and health systems, and verify disease elimination in countries and regions.

- **Universal Reach** – M&RI is the world’s only entity mandated to work with all countries to reach all communities and children worldwide, contributing to universal health coverage.

- **HIGH ROI** – Every $1 spent on measles yields $58 dollars in social and economic benefits.

- **Historic Opportunity** – For the first time in history, measles deaths have fallen below 100,000 per year – now is the time to build on progress.

- **Global Impact** – Investing in measles is an investment in global surveillance and global health security. Measles is the “canary in the coal mine” that exposes weaknesses to detect and respond to other deadly diseases.
Through partnership, M&RI, countries, and donors can work together towards a world where parents will be spared the sorrow of having a child born with congenital rubella syndrome, or watch helplessly as their child suffers from the devastating impact and possible death that comes from measles, while knowing that their children could have been reached and protected with a vaccine for less than $2 per child. The consequences of stalling efforts due to lack of funding can be devastating, resulting in the accumulation of susceptible populations and outbreaks. In order for all countries to control and eliminate (as relevant to country context) measles and rubella, it is critical that timely and sufficient funding is secured to cover planned activities. An investment today can secure a safer and healthier future tomorrow.

To discuss partnership opportunities, please contact measles@redcross.org.

M&RI’s Founding Partners: