

Driving innovation to save lives

THE VITAL ROLE OF GLOBAL HEALTH RESEARCH AND DEVELOPMENT

Despite significant gains in global health in the past several decades, too many people still die every year from preventable and treatable diseases and conditions, with the heaviest burden found in low- and middle-income countries (LMICs) and among women and children. New and better health tools and technologies—including vaccines, drugs, diagnostics, and devices—are needed to save lives and improve health around the world.

Research and development (R&D) has been the bedrock of many global health successes. Investments in global health R&D made decades ago have resulted in groundbreaking advancements that have increased life expectancy and advanced progress toward the Millennium Development Goals (MDGs). In particular, global health tools have driven down deaths of mothers and children and strengthened the fight against diseases like HIV/AIDS, malaria, diarrhea, pneumonia, and tuberculosis.

By making people healthier, global health R&D can also make economies stronger. In fact, The *Lancet* Commission on Investing in Health found that health improvements accounted for about 11 percent of growth in national income in LMICs between 2000 and 2011.¹ Investment in global health R&D also drives economic progress by building vital scientific infrastructure, strengthening human capital, and creating jobs.

Today, there is a strong pipeline of global health tools, but ongoing investment is critical to developing the next generation of tools to prevent, diagnose, treat, and one day halt preventable deaths. We must continue to advance promising tools through the R&D process and make them available where they are needed, particularly among the poorest and most marginalized, while at the same time maintaining a robust pipeline filled with tools to address



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existing and emerging health threats. Any slowdown in global health R&D could endanger future generations by leaving the world unprepared.

R&D ESSENTIAL TO MEETING GLOBAL GOALS

R&D will be essential to meeting the new Sustainable Development Goals (SDGs) being established in 2015 at the United Nations. UN member states and the global community are currently working together to finalize the goals and targets that will guide prioritization of efforts to improve health and development for the next 15 years. These goals will be even more ambitious than the MDGs, and achieving them will require new, innovative technologies, as well as delivery and financing mechanisms. The SDGs are also an opportunity for all countries to set their own health agendas. It will be increasingly important for countries of all economic levels to assert their leadership in strengthening the health R&D pipeline and ensure the global goals focus on the needs of the poorest and most marginalized populations.

For nearly 40 years, PATH has worked with public- and private-sector organizations around the world to develop simple and cost-effective solutions to global health challenges.

PATH'S LEADERSHIP IN GLOBAL HEALTH INNOVATION

For nearly 40 years, PATH has worked with a diverse array of partners around the world, including governments, academic institutions, and the private sector, to develop and advance simple and cost-effective solutions to global health challenges. Today, we have nearly 100 tools and technologies in our development pipeline, and we are working with more than 1,400 partners globally. PATH is dedicated to driving innovation across five platforms—vaccines, drugs, diagnostics, devices, and system and service innovations—and to ensuring that those innovations are made available, accessible, and affordable in the communities that need them most. With projects in more than 70 countries, we believe in fostering innovation and building capacity within countries to identify and advance homegrown solutions to health challenges.

ADVOCACY FOR GLOBAL HEALTH R&D

Despite serious public health challenges, the health technology needs of LMICs are largely ignored because of a lack of commercial incentives in these countries. In fact, only 1 to 2 percent of overall spending on biomedical research targets the health priorities of LMICs.¹ To finish the unfinished business of the MDGs and drive progress toward the new SDGs, the global health community must ensure innovations are designed around country-driven priorities and made available where the need is highest.





PATH believes that all countries need to set their own health and health research priorities. Creating supportive environments for health R&D based on country priorities will require increased investment, as well as policy changes, such as regulatory reform and frameworks to facilitate domestically driven research agendas and solutions. Countries of all economic levels will also need to invest in strengthening their own capacity for R&D and expanding

- 100+ tools and technologies in our development pipeline
- 1,300 PATH staff around the world
- Projects in 70+ countries

partnerships that bring together the strengths and skills of government, academic, private-sector, and civil society organizations to achieve shared objectives for health.

PATH works to strengthen policies to advance R&D for global health in the United States, Europe, South Africa, Kenya, and the East African Community by establishing networks of R&D stakeholders and harnessing advocacy expertise to reach decision-makers with clear evidence of the importance and impact of investments in global health technology.

PATH TECHNOLOGY INNOVATION HIGHLIGHTS

VACCINES	 <p>The MenAfriVac[®] vaccine is designed specifically to fight meningitis A outbreaks in Africa. It was developed and licensed in record time through a groundbreaking partnership between PATH, the World Health Organization, the Serum Institute of India Ltd., and government partners. Zero cases of meningitis A have occurred among the more than 217 million Africans vaccinated since 2010.</p>
DRUGS	 <p>An estimated 300,000 babies could be saved annually by scaling up use of an antiseptic called chlorhexidine that costs less than 50 cents per dose.</p>
DIAGNOSTICS	 <p>More than 185 million of the rapid diagnostic tests PATH developed for malaria have been used in low-resource settings to provide same-day results. PATH has since applied the technology to create diagnostics for neglected tropical diseases such as elephantiasis and river blindness.</p>
DEVICES	 <p>More than 100 million autodisable, pre-filled, single-use Uniject[™] injection systems developed by PATH have been distributed to help boost immunization rates worldwide.</p>

References

- 1 Jamison DT, Summers LH, Alleyne G, et al. Global health 2035: a world converging within a generation. *The Lancet*. 2013;382(9908):1859-1861.



www.path.org

PATH is the leader in global health innovation. An international nonprofit organization, we save lives and improve health, especially among women and children. We accelerate innovation across five platforms—vaccines, drugs, diagnostics, devices, and system and service innovations—that harness our entrepreneurial insight, scientific and public health expertise, and passion for health equity. By mobilizing partners around the world, we take innovation to scale, working alongside countries primarily in Africa and Asia to tackle their greatest health needs. Together, we deliver measurable results that disrupt the cycle of poor health. Learn more at www.path.org.

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