

## Expanding vaccine solutions against influenza

Public health leaders agree that the best way to control the spread of influenza is through vaccines. Each year, seasonal influenza causes 250,000 to 500,000 deaths and up to 5 million cases of severe illness. In today's interconnected world, the virus has the potential to cause millions of deaths, mostly in the developing world, if a highly virulent pandemic strain were to emerge. The development of new vaccines, increased vaccine production, and regionally appropriate strategies for vaccine use are essential to being able to meet the global population's needs during seasonal and pandemic outbreaks.

PATH is doing our part to respond to these needs by implementing multiple strategies to expand influenza vaccine solutions that will be optimal for the developing world. We are accelerating the development of new influenza vaccines that can be accessible and affordable for people in low-resource countries in influenza outbreaks and helping emerging-country manufacturers produce influenza vaccines for pandemic preparedness.

### INNOVATIVE TECHNOLOGIES FOR RAPID RESPONSE TO OUTBREAKS

Although influenza vaccination is routine in much of the industrialized world, barriers to affordability and availability often make current influenza vaccines inaccessible in the developing world. Alternative vaccine strategies are needed that can break down these barriers and bring effective protection to underserved populations. To this end, PATH is advancing the development of promising new influenza vaccines that can be accessible, affordable, and available to people in low-resource countries during influenza outbreaks.

Specifically, we are accelerating the development of new live attenuated influenza vaccines that have the potential to be affordable, highly effective, and viable options for children in these settings. We are also supporting early-stage research on innovative influenza vaccines capable of providing broad coverage across ever-changing influenza strains. Furthermore, we are conducting clinical studies in low-resource countries designed to inform future influenza vaccine development efforts and public health decisions on influenza vaccine use in the developing world.

### INFLUENZA VACCINE PRODUCTION IN VIETNAM

Global health leaders recognize that the participation of many vaccine suppliers worldwide is needed to meet real-time global demand in an influenza pandemic. With a \$7.9 million award from the Biomedical Advanced Research and Development Authority (BARDA) within the US Department of Health and Human Services, PATH is implementing a project to support the enhancement of sustainable influenza vaccine production in Vietnam. We are collaborating with several groups in Vietnam, including the Government of Vietnam and vaccine manufacturers, to assist in the production and clinical evaluation of safe and effective influenza vaccines. The project builds upon support that BARDA is currently providing to the World Health Organization to help Vietnam and other countries prepare for eventual licensure and commercial-scale manufacturing of influenza vaccines and is an important step toward increasing local and regional vaccine supplies.