

# Vaccination Challenges and Evidence-Based Solutions

Make evidence-based decisions about developing, implementing, and evaluating vaccination programs.

Vaccination is essential to infectious disease control, but achieving high vaccination coverage in the United States is hindered by

- Vaccine hesitancy
- Barriers to access
- Financial constraints
- Misinformation.

#### **More Information**

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Overcoming these challenges is critical in the time of **COVID-19**, as communities are being asked to

- Distribute vaccines efficiently
- Address vaccination lapses that may have occurred during the pandemic
- Address potential COVID-19 variants.

These wide-ranging challenges require solutions and services at every stage of the vaccination process, including

- Assessing the burden of vaccine-preventable diseases
- Identifying gaps in vaccination coverage and their causes—such as safety concerns, difficulties accessing vaccinations, and financial hurdles
- Evaluating the cost-effectiveness of vaccination strategies in schools and hospitals, and for targeted subgroups
- Determining the costs to providers of administering vaccines
- Evaluating barriers to vaccine supply and community access
- Measuring public perception and willingness to receive a vaccine
- **Designing and evaluating communication approaches** to increase vaccination, including campaign development and message testing.

With over 2 decades of experience researching, evaluating, and providing technical assistance on vaccination issues, RTI International can support your vaccination program efforts with evidence-based strategies.

# Understanding Attitudes and Barriers to Vaccination

### National Internet Flu Survey

Every year, the Centers for Disease Control and Prevention (CDC) needs up-to-date early seasonal flu vaccination coverage estimates to support messaging and promotional activities during National Influenza Vaccination Week.

Since 2014, RTI has provided this information to CDC by conducting the National Internet Flu Survey, a nationally representative survey of influenza vaccination coverage.

## Reducing Disparities in Vaccination Coverage by Poverty Status Among Young Children Survey

To address issues related to the demand for vaccines, policymakers need insight into factors contributing to vaccination coverage disparities between children living below the poverty line and children not living in poverty.

RTI conducts the Reducing Disparities in Vaccination Coverage by Poverty Status Among Young Children survey, which provides information on the

- · Challenges to accessing vaccination services
- · Quality of vaccination services received
- · Medicaid policy-related barriers
- Caregivers' knowledge, attitudes, and beliefs toward vaccination.



# Addressing Vaccine Hesitancy

The increasing prevalence of vaccine hesitancy poses a challenge for achieving high vaccination coverage. RTI conducted (1) focus groups to better understand and address vaccine hesitancy and (2) effective messaging. Our work led to recommendations for vaccination messaging to overcome vaccine hesitancy. We also helped CDC measure the extent of vaccine hesitancy around influenza in the National Internet Flu Survey.

## Supporting Local Use of Mass Vaccination Clinics

#### H1N1 Flu Pandemic

To address the H1N1 flu pandemic, CDC distributed vaccines to states and local providers and supported planning for mass vaccination clinics. We developed a tool to estimate resources needed and the cost of mass vaccination.

#### **Seasonal Flu Vaccination**

To understand whether school-located vaccination for influenza (SLV-I) was viable and cost-effective for increasing flu vaccination among children, RTI collaborated with CDC and schools throughout the United States to evaluate

- Staff attitudes toward flu vaccination
- SLV-I clinic success
- Return on investment for schools and health departments that implemented SLV-I clinics.

## Assessing Cost and Cost-Effectiveness of Vaccines

#### **National Vaccine Program**

RTI provided insight to CDC and the National Vaccine Program about barriers to providing vaccines. Our work involved the cost and cost-effectiveness of vaccines in different settings, including

- Vaccine costs in a variety of medical practice types, pharmacies, and schools using time-motion studies and online activity-based costing surveys
- Return on investment of offering vaccines in medical practices and schools
- Cost-effectiveness of alternative vaccinations for influenza, human papillomavirus, and the hepatitis B and hepatitis C viruses.

#### Immunization Information Systems Cost Assessment

RTI supported CDC's response to the COVID-19 pandemic by collecting and analyzing data on (1) costs of starting up and operating COVID-19 vaccination clinics, (2) workflow efficiency of COVID-19 vaccination clinics, and (3) costs to state immunization information systems supporting the pandemic response.

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