

# VACCINE HESITANCY:

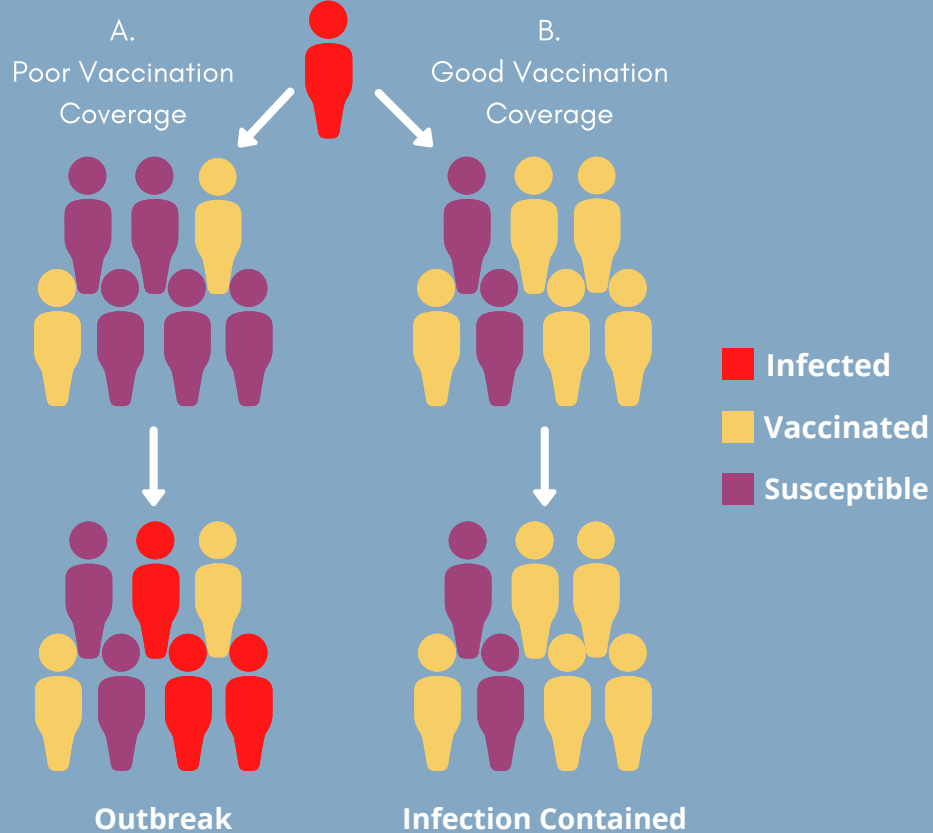
ERADICATING MISCONCEPTIONS REGARDING VACCINES IN THE UNITED STATES

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## BACKGROUND

When enough people are vaccinated, it helps protect society. This occurs through herd immunity. Widespread vaccinations make it less likely that a susceptible person will come into contact with someone who has a particular disease. However, since the late 1990s, concern has grown regarding a resurgence of the “anti-vaccine movement,” a loosely defined group of individuals who sow doubt about the effectiveness and safety of vaccines (Ventola). Many problems can arise as a result of not vaccinating the populations.

## COMMUNITY PROTECTION



## COMMON MISCONCEPTIONS

### 1. Natural immunity is better than vaccine-acquired immunity.

- In some cases, natural immunity results in a stronger immunity to the disease than a vaccination. However, if you wanted to gain immunity to measles by contracting the disease, you would face a 1 in 500 chance of death from your symptoms. In contrast, the number of people who have had severe allergic reactions from an MMR vaccine, is less than one-in-one million (Bronfin).

### 2. We don't need to vaccinate because infection rates are already so low in the United States.

- Thanks to "herd immunity," so long as a large majority of people are immunized in any population, even the unimmunized minority will be protected. With so many people resistant, an infectious disease will never get a chance to establish itself and spread. But if too many people don't vaccinate themselves or their children, they contribute to a collective danger, opening up opportunities for viruses and bacteria to establish themselves and spread (Bianco, Aida, et al.).

### 3. Vaccines contain unsafe toxins

- People have concerns over the use of formaldehyde, mercury or aluminum in vaccines. It's true that these chemicals are toxic to the human body in certain levels, but only trace amounts of these chemicals are used in FDA approved vaccines. In fact, according to the FDA and the CDC, formaldehyde is produced at higher rates by our own metabolic systems and there is no scientific evidence that the low levels of this chemical, mercury or aluminum in vaccines can be harmful (Bronfin).

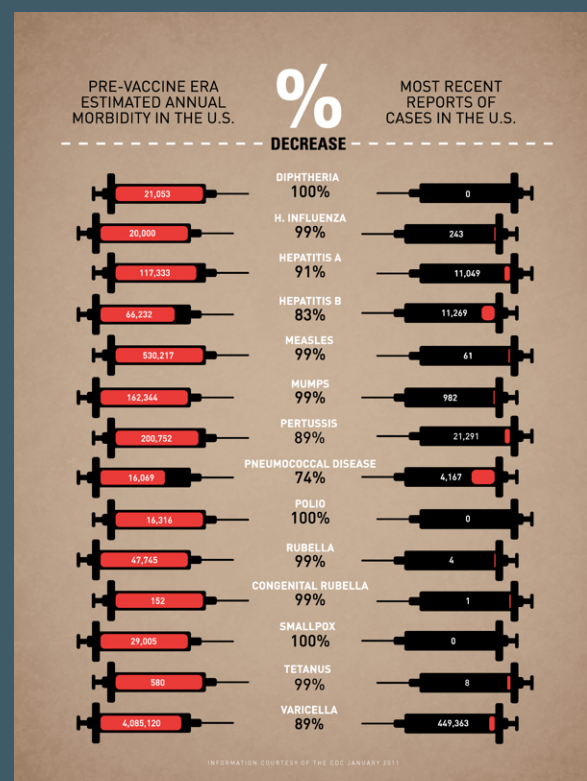
## DEBUNKING MYTHS

A child's immune system has to deal with thousands of germs on a daily basis starting at birth. Scientists estimate that babies can handle up to **10,000** shots at one time (Shen). By stimulating the immune system to do what it is naturally meant to do, vaccines make your child's immune system better at fighting off these diseases

Vaccines not only provide individual protection for those persons who are vaccinated, but they can also provide community protection by **reducing** the spread of disease within a population (Orenstein 4033)

Based on more than **50 years** of experience with vaccines, it is not likely that vaccines cause unexpected long-term problems. Studies have found **no relationship** between vaccination and the development of chronic diseases (Shen).

The safety of each vaccine is carefully checked before it is licensed and it is monitored on an ongoing basis after licensing. If a serious side effect is found, the vaccine is pulled from the market (Shen).



# POSSIBLE SOLUTIONS

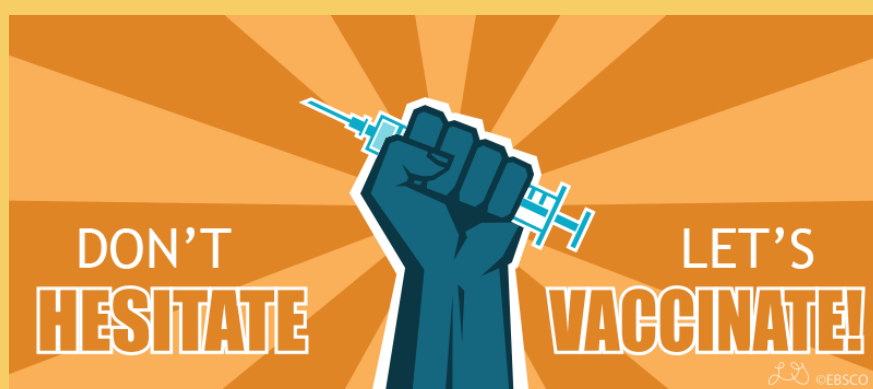
## Pediatricians and family doctors have a key role in helping parents appreciate the benefits of vaccination

- Physicians' advice has been shown to be the most important predictor of vaccine acceptance.
- All child health workers must promote vaccination—conflicting advice from medical professionals is especially damaging—and must be afforded sufficient time with each family to effectively do so. A clear presentation of the risks that delaying or refusing vaccination might pose to the child is pivotal to help parents understand how critical their decision is (Orenstein).

## Governments and health policy makers also play an essential role in promoting vaccination, educating the general public, and implementing policies that reduce the public health risks associated with vaccine hesitancy.

- WHO/Europe created the Guide to Tailoring Immunization Programs that considers the need to tailor any intervention to account for the diverse reasons that make parents reluctant to vaccinate their children.
- Some countries have implemented specific sanctions for such families, and school entry requirements including specific vaccinations have been normal public health practice for many years.
  - France has made vaccination with 11 vaccines mandatory for children—unvaccinated children **cannot** be enrolled at nurseries or schools.
  - In Australia, parents of children who are not vaccinated are **denied** the universal Family Allowance welfare payments.

The WHO SAGE also developed a 10-item vaccine hesitancy scale to assess vaccine hesitancy and vaccine perceptions. This has been implemented in Canada and several LMICs—including Guatemala, Ethiopia, and China. These studies have revealed interesting trends in the data—notably that a large proportion of the population believes in the effectiveness of vaccines, in general, while harboring some concerns about safety and the utility of certain vaccines. (Wagner)



## SOURCES:

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