

# MEASLES RUBEOLA:

## Stay Healthy, Informed, and Vaccinated

### What is Measles?<sup>1</sup>

- ❖ A highly contagious viral infection known as **Measles** or **Rubeola**
- ❖ Caused by the virus *Measles morbillivirus*.
- ❖ Common symptoms include:
  - High fever
  - Runny nose
  - Cough
  - Eye inflammation
  - White spots on inside of mouth
  - *Red rash across entire body*
- ❖ No treatment, only supportive care available
  - Symptoms can develop between 7 and 18 days after exposure to virus
  - Symptoms can last 7 to 10 days
- ❖ Childhood vaccinations provide lifelong immunity

**140,000**

Measles **deaths** globally in 2018: mostly among children under the age of 5

Number of children infected with Measles **every year** in U.S. before creation of vaccines

**3 - 4 million**

**23.2 million**

Estimated deaths that were **prevented** between 2000 - 2018 because of vaccines

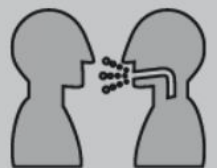


A young child with a full-body rash caused by measles

### Why is it dangerous?

#### Extremely Contagious

Spreads through coughing, sneezing, touching contaminated surfaces



If one person has measles, **9 out of 10 unvaccinated** people around him/her will also get sick



The virus can survive in the air for up to **two hours**

#### Life-Threatening

**1 in 4**

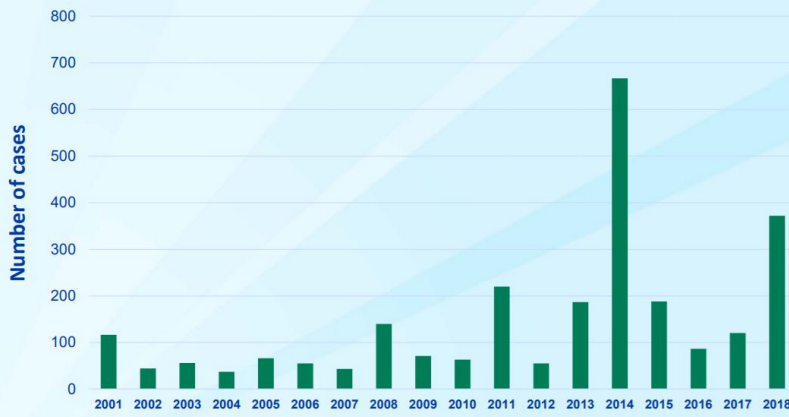
*Cases of Measles will result in hospitalization*

**1 in 1000** cases of Measles will lead to **death or extreme complications**. Including brain swelling or respiratory and neurological complications.<sup>1</sup>

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Measles cases, United States, 2001-2018\*



\*Source: Morbidity and Mortality Weekly Report (MMWR), Notifiable Diseases and Mortality Tables

### Measles cases in the USA: 2001 - 2018

People think that “eradicated” means there is no more Measles in America. This is false: there are hundreds of cases every year. Without vaccination you can still contract measles, especially if you travel abroad.<sup>4</sup>

### I can't get Measles because of herd immunity

**FALSE**

When enough people are vaccinated, everyone is at a lower risk of infection (also known as “*population immunity*”). At least **93% of the population** must have the vaccine for herd immunity to work.<sup>5</sup>

Everyone *should* get vaccinated, so people that cannot (immunocompromised) can stay safe. If too many people don't vaccinate, herd immunity no longer works.

### Measles are eradicated in the United States

**Contested**

Measles were classified as “eliminated” in the US in 2000. However, there are still major outbreaks such as in New York (2018).<sup>4</sup> Measles can still be contracted abroad and without vaccination. *It is still extremely dangerous to vulnerable populations.*

### Vaccines: True or False?

#### MMR vaccine makes you immune to the virus

**TRUE**

Vaccines train your body to fight diseases by introducing your immune system to components of the virus (called *antigens*). Two doses of the MMR vaccines are **97%** effective at preventing Measles, Mumps, and Rubella.<sup>3</sup>

#### Vaccines are dangerous / cause Autism

**FALSE**

Many myths exist about vaccines: each one has been studied and debunked. There is absolutely *no link* between vaccines and autism. Vaccines *cannot* give you the disease. Vaccines are healthy, safe, and extremely important for keeping diseases like Measles from spreading.<sup>2</sup>



Young girl receives her safe and life-long vaccine

#### SOURCES

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- (3) Mona Marin, MD, Karen R. Broder, MD, Jonathan L. Temte, MD, PhD, Dixie E. Snider, MD, Jane F. Seward. "Use of Combination Measles, Mumps, Rubella, and Varicella Vaccine: Recommendations of the Advisory Committee on Immunization Practices (ACIP)." "Morbidity and Mortality Weekly Report (MMWR)." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 2010 www.cdc.gov/mmwr/publications/index.html.
- (4) "Measles (Rubeola)." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 5 Nov. 2020, www.cdc.gov/measles/index.html.
- (5) Sebastian Funk. "Critical immunity thresholds for measles elimination." Centre for the Mathematical Modelling of Infectious Diseases London School of Hygiene & Tropical Medicine. October 19, 2017.
- https://www.texmed.org/Template.aspx?id=48227 (little girl vaccine); little boy with Measles https://www.forbes.com/sites/ninashapiro/2020/11/16/measles-deaths-top-200000-in-one-year-vaccines-would-prevent-that/?sh=6acf10d023ae