

# Measles

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DIVISION OF PUBLIC HEALTH



# Measles is an acute respiratory viral illness

### Transmission

- Direct contact with infectious droplets
- Airborne spread when an infectious person coughs, sneezes, or breaths
- Measles remains infectious in the air for up to two hours after an infected person leaves an area

# Symptoms

- Fever
- Malaise
- Cough
- Coryza
- Conjunctivitis
- Maculopapular rash appears 14 days after exposure and spreads from head to trunk to lower extremities

# Complications

- About 1 in 5 people in the U.S. who get measles will be hospitalized
- 1 out of every 1,000 people with measles will develop brain swelling, which could lead to brain damage
- 1 to 3 out of 1,000 people with measles will die, even with the best care

### Treatment

There is no treatment for measles, only supportive care

### Prevention

- The best prevention is getting the MMR vaccine
  - 2 doses, the first at 12 through 15 months of age and the second dose at 4 through 6 years of age
  - The MMR vaccine is 97% effective against measles

# Infectious period

4 days before through 4 days after rash appearance

# Incubation period

onset

7 to 21 days with an average of 11 to 12 days to symptom onset and 14 days to rash



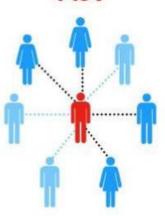
#### MEASLES

Each measles patient infects
12 to 18 people



#### **MUMPS**

Each mumps patient infects
4 to 7

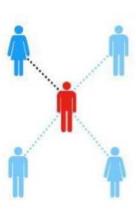


SOURCES Centers for Disease Control and Prevention; Reuters

Janet Loehrke, USA TODAY

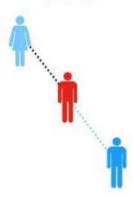
#### **INFLUENZA**

Each influenza patient infects



#### **EBOLA**

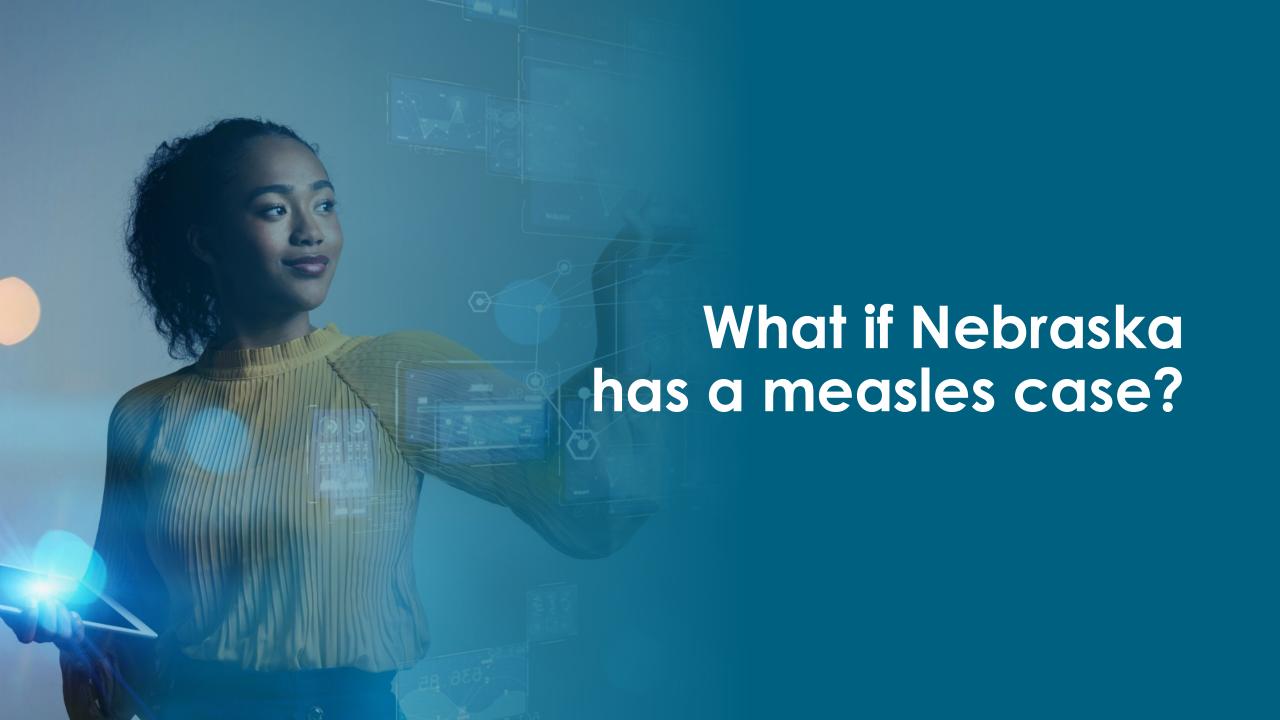
Each Ebola patient infects





Measles is one of the most contagious viruses, it can linger in air, infecting non-immune people even two hours after an infected person leaves a room.

https://www.villagepointepediatrics.com/blog/the-measles-outbreak



# Measles in Nebraska could be a reality one day

# Philadelphia measles outbreak has hospitals on alert after child was sent to day care despite quarantine instructions

Eight people have been diagnosed since last month. None was immune to measles – meaning they either never got vaccinated or contracted measles before.

# Virginia warns of potential measles exposure at DC airports

BY LAUREN SFORZA - 01/16/24 3:00 PM ET



# Officials confirm first case of measles in Colorado resident in five years

The highly contagious disease can cause brain damage and even death. State health officials are warning unvaccinated people who were at the Denver airport and Children's Hospital.



# **Measles Response**

- LHD will make sure case is isolating and find out if there are symptomatic household members
- LHD will get vaccination status of case and all household members
- LHD will interview case to get travel history as well as a history of local places visited, like school, work, daycare, restaurants, grocery stores, and movie theaters during their infectious period
- LHD will identify close contacts and get vaccination status
  - LHD will not be able to identify all close contacts because measles is infectious for up to two
    hours after an infectious person leaves a room
- NEDHHS will work with the LHD on a press release that will go out detailing potential sites of exposure and send people to a survey link on our website to try and identify additional exposed people
- RedCap survey would be posted on the NEDHHS website (like enterics) so people can self report exposure to and/or attendance at an event an infectious person was present at

# **Measles Response**

- NLHD will follow up with people who filled out the RedCap survey to assess exposures and if they are experiencing symptoms
- Anyone with 1 or 2 doses of MMR would not need to quarantine but would be under active monitoring for 21 days
- Anyone who is unvaccinated would need to quarantine for 21 days from last exposure and would be under active monitoring
- NEDHHS will report case to CDC and have a call with CDC/NEDHHS/LHD/NPHL (if needed)
- NEDHHS will post case on Epi-X in case there are out of state visitors exposed
- NEDHHS will send out a HAN to providers detailing clinical and lab diagnostic recommendations
- NEDHHS will coordinate with NPHL/CDC any specimen shipping to CDC



# THANK YOU

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