

Measles (Rubeola)

Overview^{1,2}











Measles, also known as Rubeola, is an acute viral respiratory illness. It is one of the most contagious human diseases—so contagious that up to 90% of people exposed who are not immune or vaccinated will become infected. It can lead to severe complications and death. Measles is spread by direct contact with respiratory secretions or by the airborne route when an infected person breathes, coughs, or sneezes. Measles infects the respiratory tract and then spreads throughout the body. Symptoms include high fever, cough, red watery eyes, runny nose, and a rash all over the body. Measles can affect anyone but is most common in children. Most cases in the U.S. occur among people who are not vaccinated against measles. Vaccination is the best way to prevent measles and spreading it to others.

About the Pathogen & Infection Control Measures

Infectious Agent (Pathogen)²	Agent Type: Virus Synonym(s): Measles, Rubeola	Taxonomy: ▶ Family: <i>Paramyxoviridae</i> ▶ Genus: <i>Morbillivirus</i> Characteristics: Singles-stranded enveloped RNA virus
Infectious Characteristics Definitions: ▶ Infectious dose—number of organisms necessary to cause disease. ▶ R-naught (RO)—the number of people that an infected person can be expected to transmit that disease to (“spreadability”) ▶ Incubation period—the time from exposure to infection w/symptoms. ▶ Period of communicability—time when a pathogen can be transmitted from one person to another ▶ Mortality rate—the number of deaths due to a disease divided by the total population.	Risk factors^{2:}	▶ Unvaccinated persons including infants under the age of 1 year and persons with compromised immune systems ▶ Infants/children <5 years ▶ Adults >20 years, including pregnant women
	Infectious dose and R-naught (RO)^{2,3}	90% of people exposed who are not immune or vaccinated will become infected. 9 in 10 susceptible persons who are exposed will contract measles. RO is 12-18.
	Incubation period^{2:}	7-14 days
	Period of communicability^{2:}	1 day before symptoms start and 4 days before to 4 days after the rash appear
	Signs & symptoms^{2:}	The symptoms appear 7-14 days after an exposure and include fever (as high as 105°F) and malaise, cough, runny nose, red watery eyes, and Koplik spots (cluster of white lesions on the inner cheek). Rash (see image above) develops 3-5 days after symptom onset. It usually begins on the face and spreads downward to the body.
	Duration of illness^{2:}	2-3 weeks
	Severity of illness and Mortality Rate^{2:}	1 in 5 cases will require hospitalization; 1 in 1,000 cases will develop encephalitis (a brain infection) which can result in permanent brain damage; and 1-3 in 1,000 cases in children will die.
Reservoir⁴ How the Infection Spreads	Infected persons; Touching one’s eyes, nose, or mouth after contact with an environmental surface contaminated with the infected persons respiratory secretions.	
Mode(s) of Transmission² How the Infection Spreads	Airborne and contact with contaminated surfaces.	
Survival Time on Surfaces⁴	Several hours	
Immunization/Prophylaxis/Treatment^{2,4}	There is no specific treatment - supportive care only. Preventative: CDC recommend 2 doses of the measles-mumps-rubella (MMR) vaccine which is ~97% effective at preventing measles.	
Infection Control Measures^{2,5}	General Public Health Measures: ▶ Vaccination (2 doses of MMR). ▶ Stay home if you have fever and/or rash ▶ Perform proper and frequent hand hygiene ▶ Practice respiratory hygiene/cough etiquette ▶ If exposed, self-monitor for signs and symptoms and adhere to local public health department recommendations (such as quarantine).	Healthcare-Specific Measures: ▶ Isolation Precautions: Placement in an airborne isolation room (e.g., negative pressure) with door close ▶ PPE: Respirator; other PPE per Standard Precautions. ▶ Patient Transport: Mask the patient ▶ Linens: Per routine ▶ Waste management: per routine ▶ Other: Keep patient separated from other patients (e.g., waiting room). Susceptible healthcare workers and visitors should not enter the room.
Cleaning & Disinfection¹	Follow standard cleaning and disinfection procedures using an EPA-registered disinfectant effective against the measles virus. Pay special attention to frequently touched surfaces such as toys, doorknobs, tables, and counters. Delay room entry for cleaning for 2 hours to allow for sufficient air exchanges.	

Clorox Product Recommendations

The following CloroxPro cleaner-disinfectants can be used to effectively manage the Measles (Rubeola) virus on environmental surfaces and equipment:

Clorox Healthcare® products for use against Measles	EPA Reg. No.	Measles Contact Time	
<p>Clorox Healthcare® Bleach Germicidal Wipes Item No. 30577 6" x 5" Wipes Canister 6/150 ct. Item No. 35309 6.75" x 9" Wipes Canister 6/70 ct. Item No. 32621 6.75" x 9" Wipes Softpack 9/100 ct. Item No. 31424 6.75" x 9" Individual Wipes 6/50 ct. Item No. 30358 12" x 12" Wipes Bucket 2/110 ct. Item No. 30359 12" x 12" Wipes Bucket Refill 2/110 ct.</p>		67619-12	1 minute
<p>Clorox Healthcare® Bleach Germicidal Cleaner Item No. 68970 6/32 oz. Spray Item No. 68978 4/128 oz. Refill</p>		56392-7	1 minute
<p>Clorox Healthcare® Fuzion® Cleaner Disinfectant Item No. 31478 9/32 oz. Spray</p>		67619-30	1 minute
<p>Clorox Healthcare® VersaSure® Cleaner Disinfectant Wipes 6.75" x 8" Multi-purpose Wipes, 6/85 ct., Item No. 31757 6" x 5" Multi-purpose Wipes, 6/150 ct., Item No. 31758 12" x 12" Terminal Wipes, 2/110 ct., Item No. 31759 12" x 12" Terminal Wipes Refill, 2/110 ct., Item No. 31761</p>		67619-37	30 seconds
<p>CloroxPro® Clorox® Disinfecting Wipes Item No. 15949 Fresh Scent Wipes, 6/75 ct. Item No. 15948 Lemon Scent Wipes, 6/75 ct. Item No. 31547 Fresh Scent Wipes, 1/700 ct. bucket Item No. 31428 Fresh Scent Wipes, 2/700 ct. refill</p>		67619-31	15 seconds
<p>CloroxPro® Clorox® Germicidal Bleach Item No. 30966 3/121 oz. Bottle</p>		67619-32	5 minutes
<p>CloroxPro® Clorox® Clean-Up® Disinfectant Cleaner with Bleach Item No. 31903 9/32 oz. Spray Item No. 31910 4/128 oz. Refill</p>		67619-17	30 seconds
<p>CloroxPro™ Clorox EcoClean™ Disinfecting Cleaner Item No. 60213 9/32 oz. Spray Item No. 60094 4/128 oz. Refill</p>		67619-45	30 seconds

1. World Health Organization (WHO). Measles. [Internet]. [Cited 2024 Feb 05]. Available from <https://www.who.int/news-room/fact-sheets/detail/measles>
 2. Centers for Disease Control & Prevention (CDC). Measles (Rubeola). [Internet]. [Cited 2024 Feb 5]. Available from <https://www.cdc.gov/measles/index.html>
 3. Thompson, H. One number can help explain why measles is so contagious, 2019. ScienceNews. [Internet]. [Cited 2024 Feb 5]. Available from <https://www.sciencenews.org/article/one-number-can-help-explain-why-measles-so-contagious>
 4. National Institute of Health (NIH). National Library of Medicine, StatPearls. Rubeola (Measles). [Internet]. [Cited 2024 Feb 05]. Available from <https://www.ncbi.nlm.nih.gov/books/NBK557716/>
 5. Centers for Disease Control & Prevention (CDC). Interim Infection Prevention & Control Recommendations for Measles in Healthcare Settings. [Internet]. [Cited 2024 Feb 5]. Available from <https://www.cdc.gov/infectioncontrol/guidelines/measles/index.html>

For product resources and implementation tools, contact your Clorox sales representative, call 800-492-9729 or visit www.CloroxPro.com

© 2024 Clorox Professional Products Company, 1221 Broadway, Oakland, CA 94612
 NI-62581