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Rubella from the Infection Control in Healthcare Personnel: Epidemiology and Control of Selected Infections Transmitted Among Healthcare Personnel and Patients (2024) guideline. Recommendations For recommendations about healthcare personnel who are pregnant or intending to become pregnant, please see the Pregnant HCP section.

Rubella (German Measles, Three-Day Measles) is a viral rash illness that is typically mild, but that can lead to complications and death¹. Although endemic in many countries in the world, rubella was declared eliminated in the US in 2004.² The US elimination of rubella was reconfirmed in 2011, and maintenance of elimination was reported in 2014.³⁴ No documented transmission of rubella to healthcare personnel (HCP) or others in US healthcare facilities has occurred since elimination was declared; however, imported cases of rubella and congenital rubella syndrome (CRS) have been reported, and HCP exposures have occurred.⁵ Rubella transmission in US medical settings was documented extensively in the decades before elimination, with serious consequences, including pregnancy terminations, disruption of hospital routine, absenteeism from work, and expensive containment measures.⁶⁷⁸⁹¹⁰¹¹¹²¹³¹⁴¹⁵¹⁶¹⁷

Prevention of transmission of the rubella virus in healthcare settings involves (a) ensuring healthcare personnel have presumptive evidence of immunity¹⁸; (b) using infection prevention and control practices as recommended by CDC (<https://www.cdc.gov/infectioncontrol/guidelines/isolation/appendix/type-durationprecautions.html#R>)¹⁹; and (c) excluding potentially infectious HCP from work.²²⁰

Recommendations for rubella vaccination of HCP are maintained by CDC and ACIP (<https://www.cdc.gov/vaccines/hcp/acip-recs/vaccspecific/mmr.html>).²¹ Transmission of rubella occurs through deposition of respiratory, oral, or nasal secretions from an infected source person on the mucus membranes of a susceptible host. An exposure to

rubella is generally defined as being within close proximity of an infectious source person (e.g., within approximately 6 feet of the patient) while unprotected (i.e., not wearing recommended personal protective equipment) or having mucous membrane contact with their secretions.² The risk of virus transmission may increase depending on a number of factors (e.g., decreased room ventilation, increased exposure time, closer proximity to an infectious source person). Rubella is characterized by a mild, maculopapular rash; lymphadenopathy; and fever.¹ The rash occurs in 50% to 80% of infected people and usually starts on the face, becomes generalized within 24 hours, and lasts a median of 3 days.¹ Many rubella infections are not recognized because the rash resembles other rash illnesses.¹ When rubella infection occurs during pregnancy, especially during the first trimester, congenital infection and serious consequences can result, including miscarriages, stillbirths and fetal deaths, and severe birth defects.² Additional complications of rubella include arthralgia or arthritis, which may occur in up to 70% of adult women with rubella, and rarely thrombocytopenic purpura and encephalitis.¹ The average incubation period of rubella virus is 17 days, with a range of 12 to 23 days.¹ Persons with rubella are most infectious when the rash is erupting, but they can shed virus from 7 days before to 7 days after rash onset.¹² Certain populations infected with rubella, such as infants with Congenital Rubella Syndrome, may excrete virus for prolonged periods, which may extend their infectious period.⁵²² Approximately 25% - 50% of rubella infections are asymptomatic.¹ Clinical diagnosis of rubella is unreliable; therefore, cases are laboratory confirmed.² Options for rubella testing include detection of the virus by Polymerase Chain Reaction (PCR), the presence of rubella-specific IgM antibody, or demonstration of a significant rise in IgG antibody from paired acute- and convalescent-phase sera.²² Virus detection and serologic testing can be used to confirm acute or recent rubella infection.² Information on laboratory testing for rubella is available on the CDC website (<https://www.cdc.gov/rubella/lab/index.html>).²³ No evidence exists that postexposure

vaccination is effective in preventing rubella infection⁶²². and PEP after exposure to rubella is not typically offered. Due to the lack of evidence, even if HCP receive postexposure vaccination, they are still excluded from work as is recommended for those without presumptive evidence of immunity to rubella. CDC provides information on infection control and clinical safety to help reduce the risk of infections among healthcare workers, patients, and visitors. Languages Language Assistance Languages Language Assistance

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<https://www.cdc.gov/infection-control/hcp/healthcare-personnel-epidemiology-control/rubella.html>