What is congenital rubella syndrome?

Congenital rubella syndrome (CRS) is an illness in an infant caused by rubella virus infection in the mother during pregnancy. When pregnant women are infected with rubella virus, their babies also are exposed, which may result in serious complications. The rubella virus can cause babies to be born with defects such as cataracts, deafness, heart defects, and mental retardation, or the pregnancy can end in a miscarriage or stillbirth.

Who gets congenital rubella syndrome?

Any unborn infant may contract rubella if the mother is exposed to rubella virus during pregnancy. The severity of the effects of rubella virus on the infant depends largely on the time of gestation at which infection occurs. The risk of defects in the infant is highest during the first 12 weeks of the pregnancy and decreases thereafter with defects rarely occurring after the 20th week of the pregnancy. Because of widespread vaccination, rubella and CRS are rare in the United States.

How is congenital rubella syndrome spread?

The virus that causes rubella can be found in nose and throat secretions, such as saliva, sputum, or nasal mucus, of infected people and can be spread to others through sneezing or coughing. If a pregnant woman is infected, her unborn infant can develop CRS. Infants born with CRS shed large quantities of rubella virus from body secretions for up to one year and can transmit rubella to persons caring for them who are susceptible to the disease.

What are the symptoms of congenital rubella syndrome?

Congenital infection with rubella virus can affect virtually all organ systems. Deafness, eye abnormalities, and congenital heart defects are the most common symptoms of CRS. Neurologic abnormalities, such as a reduced head size (microcephaly) and mental retardation, and other abnormalities, including spleen, liver or bone marrow problems, and low birth weight may also occur.

How soon after exposure do symptoms appear?

Symptoms of CRS most often are apparent at birth but some symptoms, such as behavior disorders or developmental delays, do not appear until weeks, months, or years later.

How is congenital rubella syndrome diagnosed?

Laboratory tests on throat, urine, or blood samples are needed to confirm the diagnosis.

What is the treatment for congenital rubella syndrome?

There is no specific treatment for rubella in a pregnant woman that will prevent CRS in the infant.

How can congenital rubella syndrome be prevented?

Prevention of CRS is the main objective of rubella vaccination programs in the United States.

Vaccination of as many individuals as possible is the best way to prevent rubella cases and outbreaks. One dose of rubella vaccine, administered at 12-15 months of age, is recommended for all children. All females of childbearing age should have documentation of rubella immunity.

How can I get more information about congenital rubella syndrome?

- If you have concerns about congenital rubella syndrome, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at https://www.vdh.virginia.gov/local-health-districts/.
- Visit the Centers for Disease Control and Prevention website at http://www.cdc.gov/Features/Rubella/.

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