HEALTH ALERT: RUBELLA IN SAN FRANCISCO
MAY 6, 2010

A confirmed case of rubella was recently diagnosed in a US-born San Francisco (SF) resident who was not vaccinated with MMR and had no history of foreign travel. Multiple persons were exposed, including a susceptible pregnant woman. Additional cases may occur. Prompt recognition and infection control are vital to prevent ongoing transmission, especially to pregnant women, whose fetuses may be gravely harmed if exposed in the first trimester.

ACTIONS REQUESTED OF ALL CLINICIANS:

1. **Be alert** for cases of rubella. Consider rubella in a patient with fever and rash, especially those with a history of foreign travel or exposure to a case of rubella, a visitor from abroad, or a US resident recently returned from foreign travel.

2. **Use airborne precautions** immediately for all patients with fever and erythematous maculopapular rash: isolate and place a face mask on patient.

3. **Immediately report** suspect cases to the Communicable Disease Control Unit (CDCU) 24 hours/7 days a week at 415-554-2830; also report to your institution’s Infection Preventionist.

4. Collect specimens per CDCU instructions and hold for public health lab testing. Do not send to commercial labs. Lab specimen forms can be found here: [http://www.sfcdcp.com/diseasereporting.html](http://www.sfcdcp.com/diseasereporting.html)

5. Work with your Infection Preventionist and/or the CDCU to identify exposed susceptible contacts.

**Epidemiology and clinical features:** Since licensure of rubella vaccine in 1969, rubella has been uncommon in the US. Since 2003, less than 15 cases have been reported in the U.S., including approximately one case in California each year. However, many foreign-born (and some US-born) persons may not have been vaccinated, and in California, almost all recent cases have been in adults, over 50% of whom were foreign-born. Rubella is an infectious, acute viral disease. After 12-23 days of incubation, patients may develop a prodrome of low grade fever, headache, malaise, mild coryza and conjunctivitis, lasting for 1-5 days. Children may not have prodrome symptoms. The classic erythematous maculopapular rash develops after the prodrome, beginning on the face and upper neck and progressing downward and outward. Lymphadenopathy and arthralgias are common in adults. Unlike measles, 25-50% of rubella cases are asymptomatic and clinical disease is usually mild. Complications of rubella include arthritis or arthralgia (primarily in adult women), thrombocytopenia, and rarely encephalitis, neuritis, or orchitis. Infection during pregnancy can result in fetal death, premature delivery, or congenital rubella syndrome (congenital anomalies including but not limited to hearing impairment, heart defects, cataracts, and glaucoma). The occurrence of congenital defects is up to 85% if maternal infection occurs during the first 12 weeks of gestation and 54% if maternal infection occurs during the first 13 to 16 weeks of gestation.

**Infection Control:** Because symptoms of rubella are similar to those of measles, immediately use airborne precautions with all suspect cases (fever and rash) until rubella diagnosis is confirmed, at which point droplet precautions are appropriate. Rubella cases are infectious 7 days before and 7 days after rash onset. For guidance see [http://www.sfcdcp.org/infectioncontrolpractitioners.html](http://www.sfcdcp.org/infectioncontrolpractitioners.html).

**Testing:** Collect serum, nasopharyngeal/throat and urine specimens and coordinate testing with CDCU (415-554-2830).

**Prevention:** At least one dose of live-attenuated rubella-containing vaccine is recommended for people 12 months of age and older. Immunize postpubertal females without documentation of rubella immunity unless they are known to be pregnant; women should be advised not to become pregnant for 28 days after vaccination. Pregnant women should be routinely screened for rubella immunity and susceptible women should be given rubella vaccine immediately postpartum, before hospital discharge. See: [http://www.sfcdcp.org/adults.html](http://www.sfcdcp.org/adults.html).

The San Francisco Department of Health provides this guidance based on the best current information. Recommendations may change, and SF recommendations may sometimes differ from those issued by the national Centers for Disease Control and Prevention, or the California Department of Public Health. Visit our website for the most current information: [http://www.sfcdcp.org/index.html](http://www.sfcdcp.org/index.html).