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Alert: Confirmed Adult Case of Measles in Washington State- Possible Airport Exposures

On January 11th, the Public Health Agency of Canada received notification of a confirmed adult case of measles from the Washington State Department of Health. There was potential for public exposure at Sea-Tac (Seattle-Tacoma) International Airport on January 6, 2007 between 10 am and 12 noon.

The confirmed case was an individual returning from Thailand with friends to the USA through Sea-Tac airport. The individual, who was ill on the flight, presented at a Washington emergency room three days later.

Since the level of exposure at the airport is unknown, physicians across North America are asked to consider this possible measles exposure in the follow-up of febrile rash illness, particularly in travellers or contacts of travellers who were aboard Asiana Air Flight 272 from Korea or at Sea-Tac Airport on January 6, 2007.

Review: Clinical Features of Measles¹

- Incubation period 10 - 12 days
- Fever
- Cough, coryza, conjunctivitis
- Koplik's spots
- Rash 2 - 4 days after prodrome, 14 days after exposure, persists 5 - 6 days

Complications including otitis media, bronchopneumonia, croup and diarrhea occur commonly in young children. Acute encephalitis occurs in 0.1% of cases. Death has been reported in 0.1 - 0.2 % of reported cases in the US

in recent years. Measles illness during pregnancy results in a higher risk of premature labour, spontaneous abortion and low-birth-weight infants.

Laboratory Diagnosis of Measles

Laboratory confirmation of measles is necessary. To confirm a suspect diagnosis of measles, the following tests should be performed:

- Acute serology for measles IgM, ideally taken between 3 – 7 days after onset of rash (can be drawn up to 28 days after rash onset).
- Acute serology for measles IgG, as soon as possible after rash onset (and no later than 7 days after rash onset).

Laboratory requisitions should be clearly marked “**stat**” and “**suspect case of measles**”.

In cases where further serologic testing is required, the Central Public Health Laboratory will notify the physician.

Additional testing: In addition to serologic testing, consider the collection of a specimen for measles virus isolation:

- Nasopharyngeal or throat swab within 4 days after rash onset, and/or urine (50ml of clean-catch) within 7 days of rash onset.

NP swabs, throat swabs and urine specimens should be refrigerated and transported on wet ice as soon as possible, as the lab must process the specimens within 48 hours of collection.

Reporting Requirements

Measles is a *reportable disease* under the Health Promotion and Protection Act. If you suspect measles in a patient, initiate laboratory testing and report to Peel Public Health immediately at **(905) 799-7700**.

¹Epidemiology and Prevention of Vaccine-Preventable Diseases. (Seventh Edition, Jan. 2002.) Department of Health and Human Services, Centers for Disease Control and Prevention.