



Department of Health and Social Services
Joel Gilbertson, Commissioner

Division of Public Health
Doug Bruce, Director

Section of Epidemiology
John Middaugh, MD, Editor

3601 C Street, Suite 540, PO Box 240249, Anchorage, Alaska 99524-0249 (907) 269-8000
24-Hour Emergency Number 1-800-478-0084

<http://www.akepi.org>

Bulletin No. 13 June 3, 2003

Suspect Case of Severe Acute Respiratory Syndrome in Anchorage—May, 2003

Background

On May 18, the Alaska Division of Public Health and the Anchorage Department of Health and Human Services received a report from the Anchorage Fire Department that a 28-year-old man (Patient A) with possible Severe Acute Respiratory Syndrome (SARS) was being transported by ambulance from a local hotel to Providence Alaska Medical Center. Patient A was the co-pilot of an air cargo plane that originated in mainland China and arrived in Anchorage on May 16. Patient A reported spending one night in Guangdong Province, China on May 15.

Clinical Presentation

After arriving in Anchorage, Patient A was in good health until the evening of May 17, when he developed muscle aches and fatigue. At 2 AM on May 18, he developed a high fever and a dry cough. Five hours later, he was transported to the hospital emergency department. At presentation, Patient A was anxious with shaking chills, a dry cough, and a temperature of 104.1°F. Rapid influenza A and B, RSV and Group B Streptococcal studies were all negative. Blood cultures were obtained. The initial chest x-ray was clear and the patient's oxygen saturation was 99% on room air.

Based upon the clinical evaluation and exposure history (Box 1), the patient met the case definition as a *suspect case of SARS* as defined by the U.S. Centers for Disease Control and Prevention (CDC) (1).

Patient A was admitted to the hospital under CDC-recommended contact and respiratory isolation precautions (2). On Monday, May 19, CDC-recommended SARS clinical specimens were collected (Box 2) (3). Specimens were sent to the Alaska State Virology Laboratory in Fairbanks for coronavirus culture and to CDC for SARS CoV culture, serology and polymerase chain reaction (PCR) testing.

Patient A's white blood cell (WBC) count went from 7,800 on admission to 2,800 two days after admission. In addition, his platelet count went from 161,000 on admission to 118,000 two days after admission. Other SARS patient case-reports have shown similar trends with their WBC and platelet counts (4).

A follow-up chest x-ray on May 19 showed a mild infiltrate in the medial left lung base, consistent with subsegmental atelectasis and pneumonia; however, repeat chest x-rays on May 20 and 22 were clear.

Patient A was afebrile from May 21-30 and was released from isolation on May 30 as per CDC's recommendations (5). As of June 3, all clinical samples have remained negative for the SARS CoV virus.

Close Contacts

Three additional crewmembers were on board the cargo airplane with Patient A, and all three were in close contact with him during the evening of May 17. Crewmembers were interviewed by CDC staff and were followed for symptoms of SARS. During their stay in Alaska, crewmember activities were not restricted, and all three contacts remained asymptomatic until their departure back to China on May 23.

Box 1. Travel criteria for suspect or probable U.S. cases of SARS (May 27, 2003). (6)

Area	First date of illness onset for inclusion as reported case‡	Last date of illness onset for inclusion as reported case†
China (mainland)	November 1, 2002	Ongoing
Hong Kong	February 1, 2003	Ongoing
Hanoi, Vietnam	February 1, 2003	May 25, 2003
Singapore	February 1, 2003	Ongoing
Toronto, Canada	April 23, 2003	Ongoing
Taiwan	May 1, 2003	Ongoing

Box 2. Clinical specimens recommended by CDC for inpatient evaluation of potential cases of SARS.

Upper respiratory

Nasopharyngeal aspirate
Nasopharyngeal swab (swab both nostrils)
Oropharyngeal swab

Lower respiratory

Bronchoalveolar lavage, tracheal aspirate or pleural tap

Blood

Serum (acute and convalescent) 5-10cc
Whole blood (purple top tube) 5-10cc

Bulk stool 10-50cc

Recommendations

1. If you suspect SARS in a patient, review the patient's symptoms and exposure history using the current CDC case definition (1).
2. If a patient meets the case definition for SARS, notify the Section of Epidemiology immediately at 907-269-8000 during working hours or 800-478-0084 after hours.
3. For more information about SARS, refer to the following websites: <http://www.cdc.gov/ncidod/sars/> and <http://www.akepi.org/id/dod/sars.stm>.

References

1. <http://www.cdc.gov/ncidod/sars/casedefinition.htm>*
 2. <http://www.cdc.gov/ncidod/sars/ic.htm>*
 3. http://www.cdc.gov/ncidod/sars/specimen_collection_sars2.htm*
 4. Severe acute respiratory syndrome—Singapore, 2003. *MMWR* 2003;52(18):405-411.
 5. <http://www.cdc.gov/ncidod/sars/ic-closecontacts.htm>*
 6. <http://www.cdc.gov/ncidod/sars/casedefinition.htm>*
- All websites accessed on May 27, 2003