

09-ID-11

Committee: Infectious

Title: National Surveillance for Severe Acute Respiratory Syndrome (SARS-CoV)

I. Statement of the Problem

CSTE position statement 07-EC-02 recognized the need to develop an official list of nationally notifiable conditions and a standardized reporting definition for each condition on the official list. The position statement also specified that each definition had to comply with American Health Information Community recommended standards to support “automated case reporting from electronic health records or other clinical care information systems.” In July 2008, CSTE identified sixty-eight conditions warranting inclusion on the official list, each of which now requires a standardized reporting definition.

II. Background and Justification

Background¹

Severe acute respiratory syndrome (SARS) is a recently recognized febrile severe lower respiratory illness that is caused by infection with a novel coronavirus, SARS-associated coronavirus (SARS-CoV). During the winter of 2002 through the spring of 2003, the World Health Organization (WHO) received reports of >8,000 SARS cases and nearly 800 deaths. Early recognition of cases and application of appropriate infection control measures will be critical in controlling future outbreaks.

Many studies have been undertaken or are underway to evaluate whether there are specific laboratory or clinical parameters that can distinguish SARS-CoV disease from other febrile respiratory illnesses. Researchers are also working on the development of laboratory tests to improve diagnostic capabilities for SARS-CoV and other respiratory pathogens. To date, however, no specific clinical or laboratory findings can distinguish with certainty SARS-CoV disease from other respiratory illnesses rapidly enough to inform management decisions that must be made soon after the patient presents to the healthcare system. Therefore, early clinical recognition of SARS-CoV disease still relies on a combination of clinical and epidemiologic features:

- The vast majority of patients with SARS-CoV disease (1) have a clear history of exposure either to a SARS patient or to a setting in which SARS-CoV transmission is occurring, and 2) develop pneumonia.
- In the absence of any person-to-person transmission of SARS-CoV worldwide, the overall likelihood that a patient being evaluated for fever or respiratory illness has SARS-CoV disease will be exceedingly low unless there are both typical clinical findings and some accompanying epidemiologic evidence that raises the suspicion of exposure to

¹ Much of the material in the background is directly quoted from the CDC’s SARS Website. See the References for further information on this source.

SARS-CoV. Therefore, one approach in this setting would be to consider the diagnosis only for patients who require hospitalization for unexplained pneumonia and who have an epidemiologic history that raises the suspicion of exposure, such as recent travel to a previously SARS-affected area (or close contact with an ill person with such a travel history), employment as a healthcare worker with direct patient contact or as a worker in a laboratory that contains live SARS-CoV, or an epidemiologic link to a cluster of cases of unexplained pneumonia. Once person-to-person SARS-CoV transmission has been documented anywhere in the world, the positive predictive value of even early clinical symptoms (e.g., fever or lower respiratory symptoms in the absence of pneumonia), while still low, may be sufficiently high—when combined with an epidemiologic link to settings in which SARS-CoV has been documented—to lead clinicians to consider a diagnosis of SARS-CoV disease.

Justification

SARS meets the definition of a nationally and **immediately** notifiable condition—as specified in CSTE position statement 08-EC-02—for the following reason(s):

- The condition is identified as immediately reportable by the International Health Regulations (IHR-2005).
- A majority of state and territorial jurisdictions—or jurisdictions comprising a majority of the US population—have laws or regulations requiring **immediate** reporting of the condition to public health authorities; the Centers for Disease Control and Prevention (CDC) requests **immediate** notification of the condition; and the CDC has condition-specific policies and practices concerning its response to, and use of, notifications.

Immediate case notification to the national level is necessary because, 1) currently there is no known person-to-person SARS-CoV transmission worldwide and even a single case is a critical public health concern, 2) it is required under IHR-2005, 3) SARS-CoV is a nationally notifiable disease with extremely significant US and global implications, in part because of the high case fatality rate and the speed with which it spread in certain settings in 2002-2003, and 4) rapid CDC epidemiologic and laboratory support can be initiated.

CDC will respond to the case notification by verifying and confirming the information with the state to facilitate outbreak control and management. CDC epidemiologic and laboratory support will be provided, as needed. Under IHR-2005, DHHS will notify the WHO. In addition, CDC will notify and collaborate with relevant CDC-based departments such as Office of the Director, the Director's Emergency Operations Center (DEOC) and the Division of Global Migration and Quarantine, and outside partners, such as CSTE.

III. Statement of the desired action(s) to be taken

CSTE requests that CDC adopt this standardized reporting definition and case classification for SARS to facilitate more timely, complete, and standardized local and national reporting of this condition.

IV. Goals of Surveillance

To provide information on the temporal, geographic, and demographic occurrence of SARS to facilitate its prevention and control.

V. Methods for Surveillance

Surveillance for SARS should use the sources of data and the extent of coverage listed in table V.

Table V. Recommended sources of data and extent of coverage for ascertaining cases of SARS

Source of data for case ascertainment	Coverage Population-wide
clinician reporting	x
laboratory reporting	x
reporting by other entities (e.g., hospitals, veterinarians, pharmacies)	x
death certificates	x
hospital discharge or outpatient records	x
extracts from electronic medical records	x
telephone survey	
school-based survey	
other _____	

VI. Criteria for Reporting

Reporting refers to the process of healthcare providers or institutions (e.g., clinicians, clinical laboratories, hospitals) submitting basic information to governmental public health agencies about cases of illness that meet certain reporting requirements or criteria. The purpose of this section is to provide those criteria that should be used by humans and machines to determine whether a specific illness should be reported.²

² “Human-based” criteria (described below under “A. Narrative”) can be applied by medical care providers and laboratory staff based on clinical judgment and clinical diagnosis. Machine-based criteria (described below under

A. Narrative description of criteria to determine whether a case should be reported to public health authorities

Report any illness to public health authorities that has NO identifiable cause of clinical or autopsy findings AND meets any of the following criteria:

- A person with a positive diagnostic test specific for SARS-CoV (see Table VI-B)
- A person who meets the clinical criteria for early, mild-to-moderate, or severe illness (see Table VI-B) AND who had either (1) close contact with a person with confirmed SARS-CoV disease, *or* (2) close contact with a person with mild-to-moderate or severe respiratory illness and history of travel in the 10 days before onset of symptoms to a foreign or domestic location with documented, or suspected recent transmission of SARS-CoV
- A person who meets the clinical criteria for mild-to-moderate or severe illness (see Table VI-B) AND who either (1) traveled to a foreign or domestic location with documented or suspected recent transmission of SARS-CoV within 10 days before onset of symptoms, *or* (2) had close contact with a person with mild-to-moderate or severe respiratory illness and history of travel in the 10 days before onset of symptoms to a foreign or domestic location with documented, or suspected recent transmission of SARS-CoV
- A person who meets the clinical criteria for severe illness (see Table VI-B) AND who either (1) traveled to mainland China, Hong Kong, or Taiwan, or close contact with an ill person with a history of recent travel to one of these areas, (2) worked in an occupation associated with a risk for SARS-CoV exposure (e.g., health-care worker with direct patient contact and worker in a laboratory that contains live SARS-CoV), *or* (3) was part of a cluster of cases of atypical pneumonia without an alternative diagnosis
- A person whose healthcare record contains a diagnosis of SARS.
- A person whose death certificate lists SARS as a cause of death or a significant condition contributing to death.

Other recommended reporting procedures

- All cases of SARS should be reported immediately.
- Reporting should be ongoing and routine.

“B. Table”) can be applied using computerized algorithms that operate in electronic health record systems, including computerized records of laboratory test orders and laboratory test results.

B. Table of criteria to determine whether a case should be reported to public health authorities

Table VI-B. Proposed Table of criteria to determine whether a case should be reported to public health authorities. Note: The following criteria are proposed for evaluation before general implementation. For purposes of currently implementing reporting the narrative description in VI-A, should be used.

Criterion	Reporting		
<i>Clinical Presentation</i>			
Early illness (two or more of the following clinical findings must be present):			
- fever (any)	O†		
- chills	O†		
- rigors	O†		
- myalgia	O†		
- headache	O†		
- diarrhea	O†		
- sore throat	O†		
- rhinorrhea	O†		
Mild-to-moderate respiratory illness (fever and one or more clinical findings of lower respiratory illness):			
- fever (>100.4° F or >38° C)		N	N
- cough		O	
- shortness of breath		O	
- difficulty breathing		O	
Severe respiratory illness (meets clinical criteria for mild-to-moderate respiratory illness and one more of the following findings):			
- radiographic evidence of pneumonia			O
- acute respiratory distress syndrome			O
- autopsy evidence of pneumonia			O
- autopsy evidence of acute respiratory distress syndrome			O
healthcare record contains a diagnosis of SARS	S		
death certificate lists SARS as a cause of death or a significant condition contributing to death	S		
identifiable cause of clinical or autopsy findings		A	A A
<i>Laboratory findings‡</i>			

Criterion	Reporting		
detection of serum antibody to SARS-CoV by a test validated by CDC	S		
isolation in cell culture of SARS-CoV from a clinical specimen	S		
detection of SARS-CoV RNA by a reverse transcription polymerase chain reaction test validated by CDC and with subsequent confirmation in a reference laboratory	S		
no detection of antibody to SARS-CoV in a serum specimen obtained >28 days after onset of illness (if obtained)		A	A A
<i>Epidemiological risk factors</i>			
Likely exposure to SARS-CoV (one or more of the following in the 10 days before onset of symptoms)			
- close contact with a person with confirmed SARS-CoV disease		O	O
- close contact with a person with mild-to-moderate or severe respiratory illness and history of travel in the 10 days before onset of symptoms to a foreign or domestic location with documented, or suspected recent transmission of SARS-CoV		O	O
Possible exposure to SARS-CoV (one or more of the following in the 10 days before onset of symptoms)			
- travel to a foreign or domestic location with documented or suspected recent transmission of SARS-CoV within 10 days before onset of symptoms			O
- close contact with a person with mild-to-moderate or severe respiratory illness and history of travel in the 10 days before onset of symptoms to a foreign or domestic location with documented, or suspected recent transmission of SARS-CoV			O
If SARS-CoV re-emerges, consider SARS-CoV in the differential diagnosis for persons requiring hospitalization for pneumonia confirmed radiographically or acute respiratory distress syndrome without identifiable etiology and who have one of the following risk factors in the 10 days before the onset of illness:			
- travel to mainland China, Hong Kong, or Taiwan, or close contact with an ill person with a history of recent travel to one of these areas			
- employment in an occupation associated with a risk for SARS-CoV exposure (e.g., health-care worker with direct patient contact and worker in a laboratory that contains live SARS-CoV)			
- part of a cluster of cases of atypical pneumonia without an alternative diagnosis			

Notes:

S = This criterion alone is sufficient to report a case

N = All “N” criteria in the same column—in conjunction with at least one of any “O” criteria in each category (e.g., clinical presentation and laboratory findings) in the same column—are required to report a case.

O = At least one of any “O” criteria in each category (e.g., clinical presentation and laboratory findings) in the same column—in conjunction with all other “N” criteria in the same column—is required to report a case.

A = This criterion must be absent (i.e., NOT present) for the case to meet the case definition.

† Two or more “O” of the clinical criteria for early illness are required to report or confirm a case.

‡ For additional information and guidance on laboratory testing for SARS-CoV, see CDC 2004b, CDC 2005a, CDC 2005c, Erdman 2006.

RUI = Report Under Investigation

C. Disease Specific Data Elements:

Disease-specific data elements to be included in the initial report are listed below.

Group	Element
<i>Clinical information</i>	
Signs and symptoms	Symptom onset date
<i>Clinical status</i>	
	Hospitalized
<i>Epidemiologic risk factors</i>	
Occupation	Healthcare worker
Contact and travel	<ul style="list-style-type: none"> • Close contact in the 10 days before onset of symptoms with a person with confirmed or probable SARS-CoV disease • Close contact with a person with mild-to-moderate or severe respiratory illness and history of travel in the 10 days before onset of symptoms to a foreign or domestic location with documented, or suspected recent transmission of SARS-CoV • Travel to a foreign or domestic location with documented or suspected recent local transmission of SARS-CoV • Travel destination • Travel date of arrival • Travel date of departure
<i>Classification of patient</i>	
Specimens sent to CDC	Specimen or tissue type Date specimen sent

Source: CDC. Public health guidance for community-level preparedness and response to severe acute respiratory syndrome (SARS) version 2: Supplement B: SARS surveillance. Atlanta: CDC; 2004, pages 20–28. Available from: <http://www.cdc.gov/ncidod/sars/guidance/B/index.htm>.

VII. Case Definition for Case Classification

A. Narrative description of criteria to determine whether a case should be classified as confirmed, probable, or under investigation.

Clinical Criteria

Early illness

Presence of two or more of the following features: fever (might be subjective), chills, rigors, myalgia, headache, diarrhea, sore throat, or rhinorrhea

Mild-to-moderate respiratory illness

- Temperature of $>100.4^{\circ}\text{F}$ ($>38^{\circ}\text{C}$)*, and
- One or more clinical findings of lower respiratory illness (e.g., cough, shortness of breath, or difficulty breathing)

Severe respiratory illness

- Meets clinical criteria of mild-to-moderate respiratory illness, **and**
- One or more of the following findings:
 - Radiographic evidence of pneumonia, **or**
 - Acute respiratory distress syndrome, **or**
 - Autopsy findings consistent with pneumonia or acute respiratory distress syndrome without an identifiable cause

Epidemiologic Criteria

Possible exposure to SARS-associated coronavirus (SARS-CoV)

One or more of the following exposures in the 10 days before onset of symptoms:

- Travel to a foreign or domestic location with documented or suspected recent transmission of SARS-CoV†, or
- Close contact§ with a person with mild-to-moderate or severe respiratory illness and history of travel in the 10 days before onset of symptoms to a foreign or domestic location with documented, or suspected recent transmission of SARS-CoV†

Likely exposure to SARS-CoV

One or more of the following exposures in the 10 days before onset of symptoms:

- Close contact§ with a person with confirmed SARS-CoV disease, or
- Close contact§ with a person with mild-to-moderate or severe respiratory illness for whom a chain of transmission can be linked to a confirmed case of SARS-CoV disease in the 10 days before onset of symptoms

Laboratory Criteria

Tests to detect SARS-CoV are being refined and their performance characteristics assessed¶; therefore, criteria for laboratory diagnosis of SARS-CoV are changing. The following are general criteria for laboratory confirmation of SARS-CoV:

- Detection of serum antibody to SARS-CoV by a test validated by CDC (e.g., enzyme

- immunoassay), or
- Isolation in cell culture of SARS-CoV from a clinical specimen, or
- Detection of SARS-CoV RNA by a reverse transcription polymerase chain reaction test validated by CDC and with subsequent confirmation in a reference laboratory (e.g., CDC)

Information about the current criteria for laboratory diagnosis of SARS-CoV is available at <http://www.cdc.gov/ncidod/sars/labdiagnosis.htm>

Exclusion Criteria

A case may be excluded as a SARS report under investigation (SARS RUI), including as a CDC-defined probable SARS-CoV case, if any of the following apply:

- An alternative diagnosis can explain the illness fully**, **or**
- Antibody to SARS-CoV is undetectable in a serum specimen obtained >28 days after onset of illness††, **or**
- The case was reported on the basis of contact with a person who was excluded subsequently as a case of SARS-CoV disease; then the reported case also is excluded, provided other epidemiologic or laboratory criteria are not present.

Case Classification

SARS Report Under Investigation

Reports in persons from areas where SARS is not known to be active

- SARS RUI-1: Cases compatible with SARS in groups likely to be first affected by SARS-CoV§§ if SARS-CoV is introduced from a person without clear epidemiologic links to known cases of SARS-CoV disease or places with known ongoing transmission of SARS-CoV

Reports in persons from areas where SARS activity is occurring

- SARS RUI-2: Cases meeting the clinical criteria for mild-to-moderate illness and the epidemiologic criteria for possible exposure (spring 2003 CDC definition for suspect cases¶¶)
- SARS RUI-3: Cases meeting the clinical criteria for severe illness and the epidemiologic criteria for possible exposure (spring 2003 CDC definition for probable cases¶¶)
- SARS RUI-4: Cases meeting the clinical criteria for early or mild-to-moderate illness and the epidemiologic criteria for likely exposure to SARS-CoV

SARS-CoV disease

Probable: meets the clinical criteria for severe respiratory illness and the epidemiologic criteria for likely exposure to SARS-CoV

Confirmed: clinically compatible illness (i.e., early, mild-to-moderate, or severe) that is laboratory confirmed

Notes:

* A measured documented temperature of >100.4° F (>38° C) is expected. However, clinical judgment may allow a small proportion of patients without a documented fever to meet this criterion. Factors that might be considered include patient's self-report of fever, use of

antipyretics, presence of immunocompromising conditions or therapies, lack of access to health care, or inability to obtain a measured temperature. Initial case classification based on reported information might change, and reclassification might be required.

† Types of locations specified will vary (e.g., country, airport, city, building, or floor of building). The last date a location may be a criterion for exposure is 10 days (one incubation period) after removal of that location from CDC travel alert status. The patient's travel should have occurred on or before the last date the travel alert was in place. Transit through a foreign airport meets the epidemiologic criteria for possible exposure in a location for which a CDC travel advisory is in effect. Information about CDC travel alerts and advisories and assistance in determining appropriate dates are available at <http://www.cdc.gov/ncidod/sars/travel.htm>.

§ Close contact is defined as having cared for or lived with a person with SARS or having a high likelihood of direct contact with respiratory secretions and/or body fluids of a person with SARS (during encounters with the patient or through contact with materials contaminated by the patient) either during the period the person was clinically ill or within 10 days of resolution of symptoms. Examples of close contact include kissing or embracing, sharing eating or drinking utensils, close (i.e., <3 feet) conversation, physical examination, and any other direct physical contact between persons. Close contact does not include activities such as walking by a person or sitting across a waiting room or office for a brief time.

¶ The identification of the etiologic agent of SARS (i.e., SARS-CoV) led to the rapid development of enzyme immunoassays and immunofluorescence assays for serologic diagnosis and reverse transcription polymerase chain reaction assays for detection of SARS-CoV RNA in clinical samples. These assays can be very sensitive and specific for detecting antibody and RNA, respectively, in the later stages of SARS-CoV disease. However, both are less sensitive for detecting infection early in illness. The majority of patients in the early stages of SARS-CoV disease have a low titer of virus in respiratory and other secretions and require time to mount an antibody response. SARS-CoV antibody tests might be positive as early as 8–10 days after onset of illness and often by 14 days after onset of illness, but sometimes not until 28 days after onset of illness. Information about the current criteria for laboratory diagnosis of SARS-CoV is available at <http://www.cdc.gov/ncidod/sars/labdiagnosis.htm>.

** Factors that may be considered in assigning alternate diagnoses include the strength of the epidemiologic exposure criteria for SARS-CoV disease, the specificity of the alternate diagnostic test, and the compatibility of the clinical presentation and course of illness with the alternative diagnosis.

†† Current data indicate that >95% of patients with SARS-CoV disease mount an antibody response to SARS-CoV. However, health officials may choose not to exclude a case on the basis of lack of a serologic response if reasonable concern exists that an antibody response could not be mounted.

§§ Consensus guidance is in development between CDC and CSTE on which groups are most likely to be affected first by SARS-CoV if it reemerges. SARS-CoV disease should be considered at a minimum in the differential diagnoses for persons requiring hospitalization for pneumonia confirmed radiographically or acute respiratory distress syndrome without identifiable etiology and who have one of the following risk factors in the 10 days before the onset of illness:

- Travel to mainland China, Hong Kong, or Taiwan, or close contact with an ill person with a history of recent travel to one of these areas, or
- Employment in an occupation associated with a risk for SARS-CoV exposure (e.g., health-

care worker with direct patient contact and worker in a laboratory that contains live SARS-CoV), or

- Part of a cluster of cases of atypical pneumonia without an alternative diagnosis.

Guidelines for the identification, evaluation, and management of these patients are available at <http://www.cdc.gov/ncidod/sars/absenceofsars.htm>.

¶¶ During the 2003 SARS epidemic, CDC case definitions were the following:

Suspect case

- Meets the clinical criteria for mild-to-moderate respiratory illness and the epidemiologic criteria for possible exposure to SARS-CoV but does not meet any of the laboratory criteria and exclusion criteria; or
- Unexplained acute respiratory illness that results in death of a person on whom an autopsy was not performed and that meets the epidemiologic criteria for possible exposure to SARS-CoV but does not meet any of the laboratory criteria and exclusion criteria

Probable case

- Meets the clinical criteria for severe respiratory illness and the epidemiologic criteria for possible exposure to SARS-CoV but does not meet any of the laboratory criteria and exclusion criteria.

B. Classification Tables

Table VII-B lists the criteria that must be met for a case to be classified as confirmed, probable (presumptive), or under investigation.

Table VII-B. Proposed table of criteria to determine whether a case is classified. Note: The following criteria are proposed for evaluation before general implementation. For purposes of current notification, the narrative description in VII-A, should be used.

Criterion	Case Classification						
	Confirmed	Probable	Reports under investigation (RUI)				
			RUI-1	RUI-2	RUI-3	RUI-4	
<i>Clinical Presentation</i>							
Early illness (two or more of the following clinical findings must be present):							
- fever (any)	O†						O†
- chills	O†						O†
- rigors	O†						O†
- myalgia	O†						O†
- headache	O†						O†
- diarrhea	O†						O†

Criterion	Case Classification							
				Reports under investigation (RUI)				
	Confirmed			Probable	RUI-1	RUI-2	RUI-3	RUI-4
- sore throat	O†							O†
- rhinorrhea	O†							O†
Mild-to-moderate respiratory illness (fever and one or more clinical findings of lower respiratory illness):								
- fever (>100.4° F or >38° C)		N	N	N	N	N	N	O
- cough		O				O		O
- shortness of breath		O				O		O
- difficulty breathing		O				O		O
Severe respiratory illness (meets clinical criteria for mild-to-moderate respiratory illness and one more of the following findings):								
- radiographic evidence of pneumonia			O	O	O		O	
- acute respiratory distress syndrome			O	O	O		O	
- autopsy evidence of pneumonia			O	O	O		O	
- autopsy evidence of acute respiratory distress syndrome			O	O	O		O	
healthcare record contains a diagnosis of SARS								
death certificate lists SARS as a cause of death or a significant condition contributing to death								
identifiable cause of clinical or autopsy findings				A	A	A	A	A
<i>Laboratory findings</i> ‡								
detection of serum antibody to SARS-CoV by a test validated by CDC	O	O	O					
isolation in cell culture of SARS-CoV from a clinical specimen	O	O	O					

Criterion	Case Classification							
				Reports under investigation (RUI)				
	Confirmed			Probable	RUI-1	RUI-2	RUI-3	RUI-4
detection of SARS-CoV RNA by a reverse transcription polymerase chain reaction test validated by CDC and with subsequent confirmation in a reference laboratory	O	O	O					
no detection of antibody to SARS-CoV in a serum specimen obtained >28 days after onset of illness (if obtained)				A	A	A	A	A
<i>Epidemiological risk factors</i>								
Likely exposure to SARS-CoV (one or more of the following in the 10 days before onset of symptoms)								
- close contact with a person with confirmed SARS-CoV disease				O				O
- close contact with a person with mild-to-moderate or severe respiratory illness and history of travel in the 10 days before onset of symptoms to a foreign or domestic location with documented, or suspected recent transmission of SARS-CoV				O				O
Possible exposure to SARS-CoV (one or more of the following in the 10 days before onset of symptoms)								
- travel to a foreign or domestic location with documented or suspected recent transmission of SARS-CoV within 10 days before onset of symptoms						O	O	
- close contact with a person with mild-to-moderate or severe respiratory illness and history of travel in the 10 days before onset of symptoms to a foreign or domestic location with documented, or suspected recent transmission of SARS-CoV						O	O	

Criterion	Case Classification						
				Reports under investigation (RUI)			
	Confirmed		Probable	RUI-1	RUI-2	RUI-3	RUI-4
If SARS-CoV re-emerges, consider SARS-CoV in the differential diagnosis for persons requiring hospitalization for pneumonia confirmed radiographically or acute respiratory distress syndrome without identifiable etiology and who have one of the following risk factors in the 10 days before the onset of illness:							
- travel to mainland China, Hong Kong, or Taiwan, or close contact with an ill person with a history of recent travel to one of these areas				O			
- employment in an occupation associated with a risk for SARS-CoV exposure (e.g., health-care worker with direct patient contact and worker in a laboratory that contains live SARS-CoV)				O			
- part of a cluster of cases of atypical pneumonia without an alternative diagnosis				O			

Notes:

N = All “N” criteria in the same column—in conjunction with at least one of any “O” criteria in each category (e.g., clinical presentation and laboratory findings) in the same column—are required to classify a case.

O = At least one of any “O” criteria in each category (e.g., clinical presentation and laboratory findings) in the same column—in conjunction with all other “N” criteria in the same column—is required to classify a case.

A = This criterion must be absent (i.e., NOT present) for the case to meet the case definition.

† Two or more “O” of the clinical criteria for early illness are required to report or classify a case.

‡ For additional information and guidance on laboratory testing for SARS-CoV, see CDC 2004b, CDC 2005a, CDC 2005c, Erdman 2006.

RUI = Report Under Investigation

VIII. Period of Surveillance

Surveillance should be ongoing.

IX. Data sharing/release and print criteria

- Notification to CDC of all cases prior to classification of SARS is recommended.
- The frequency and formats used to disseminate information is dependent upon the status of transmission of SARS-CoV worldwide. In the case of person-to-person transmission of SARS-CoV worldwide, information will be provided to states and territories regarding the results of analyses of the compiled case data rapidly, in a real-time fashion using web-based and electronic formats. Other formats to be used include the weekly MMWR.
- In the absence of person-to-person transmission of SARS-CoV worldwide, the goal of domestic surveillance is to maximize early detection of cases of SARS-CoV disease while minimizing unnecessary laboratory testing, concerns about SARS-CoV, implementation of control measures, and social disruption. In the case of person-to-person transmission of SARS-CoV worldwide, active surveillance for SARS-CoV will resume and rapid case notification, laboratory confirmation, and follow-up of suspected cases will be essential to controlling the outbreak and preventing transmission. Cumulative or aggregate case data will be used to evaluate the features of the outbreak, transmission, and institute preventive measures.
- The release of published data based on case notifications is dependent upon the status of transmission of SARS-CoV worldwide. In the case of person-to-person transmission of SARS-CoV worldwide, anticipated release of published data includes rapidly disseminated formats such as the CDC and state web pages, HAN, the weekly MMWR, and the WHO webpage. International publications (e.g., WHO reports) of data and peer-review manuscripts summarizing more comprehensive data analysis are also anticipated. Prior to publication, all data will be verified with the state and will not include any personal identifiers.

X. References

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XI. Coordination:

Agencies for Response:

- (1) Thomas R. Frieden, MD, MPH
Director
Centers for Disease Control and Prevention
1600 Clifton Road, NE
Atlanta GA 30333
(404) 639-7000
txf2@cdc.gov

XII. Submitting Author:

- (1) Christine Hahn, MD
State Epidemiologist
Idaho Division of Health
450 W. State St.
Boise, ID, 83702
(208-334-5939
hahnc@dhw.idaho.gov

Co-Authors:

- (1) Harry F. Hull, Medical Epidemiologist
HF Hull & Associates, LLC
1140 St. Dennis Court
Saint Paul, MN 55116
(651) 695-8114
hullhf@msn.com

- (2) Associate Member
Cecil Lynch, Medical Informaticist
OntoReason
7292 Shady Woods Circle
Midvale, UT 84047
(916) 412.5504
clynch@ontoreason.com

- (3) Associate Member
R. Gibson Parrish, Medical Epidemiologist
P.O. Box 197
480 Bayley Hazen Road
Peacham, VT 05862
(802) 592-3357
gib.parrish@gmail.com