

PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

This Organization and Interagency Coordination Plan contains brief descriptions of Health Department actions that will require the assistance and support of other organizations inside and outside of state government, plus brief descriptions of the actions of other organizations that would be essential to the state’s response to a large SARS outbreak. Part 4, the Department of Health Operations Plan, consists of seven appendices that provide a complete description of Health Department actions related to SARS preparedness and response.

I. COMMAND AND CONTROL

A. Background

A few cases of SARS in Vermont may not constitute an emergency, because the Vermont Department of Health is accustomed to dealing with infectious disease outbreaks. However, a large outbreak could exceed the department’s capacity to manage it without assistance from other agencies. Additional resources of the State of Vermont and of private organizations would be needed to stop widespread transmission of SARS in Vermont. This section describes the authority and responsibility of those organizations and how they would work together.

Lead	Vermont Department of Health
Partners	Agency of Human Services Department of Public Safety Vermont Emergency Management Vermont State Police Vermont National Guard Department of Buildings and General Services Vermont Association of Hospitals and Health Systems Vermont Assembly of Home Health Agencies American Red Cross, Vermont Chapters Other emergency relief organizations
Purpose	To coordinate the efforts of individual agencies as they work toward the common goal of stopping the spread of disease and protecting life, property, and the environment.

B. The Goals of Command and Control and the Incident Command System

“Command and control” refers to the institutional arrangements for command, control, and coordination of response to emergencies. The Incident Command System (ICS) provides a tool to coordinate the efforts of individual agencies as they work toward the common goal of stopping the spread of disease and protecting life, property, and the environment. ICS uses principles that have been proven to improve efficiency and effectiveness in a business setting and applies the principles to emergency response.

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

To coordinate the effective use of all the available resources, agencies need a formalized management structure that lends consistency, fosters efficiency, and provides direction during a response. The ICS organization is built around five major components:

- Command
- Planning
- Operations
- Logistics
- Finance/Administration

C. Authority and Responsibility

1. National level: In the event of a SARS outbreak in the U.S., the federal Department of Health and Human Services will be the primary agency for health and medical services, providing federal assistance to supplement state and local resources.

- Health & Human Services will activate its Emergency Operations Center in Washington, D.C.
- The regional Health & Human Services director in Boston will be the contact for Vermont.
- Federal support agencies will include FEMA, the Veterans Administration, and possibly the FBI and the National Guard.
- Within Health & Human Services, CDC is the lead agency for responding to a suspected SARS outbreak. Upon request by the state, CDC will augment local and state resources for disease surveillance, epidemiologic response, diagnostic laboratory services and reagents, public information, education and communication, and disease containment and control. Although most federal disaster plans characterize federal action as support and assistance in response to a state request, CDC also has the authority to impose a federal quarantine if local efforts are inadequate.

2. State level: In the event of a SARS outbreak in Vermont, the Department of Health will be the primary agency for controlling the outbreak and coordinating the treatment of patients through its Incident Command System.¹ The commissioner of health has the power and duty to supervise and direct the execution of all laws relating to public health. *18 VSA chapters 1,3.* Other agencies and departments of Vermont state government will work with the Department of Health to support this mission. If the size of an outbreak or speed of transmission is likely to exceed the capacity of the Department of Health to control it, the commissioner of health will ask the Department of Public Safety/Vermont Emergency Management to activate the State Emergency Operations Center, and the Vermont State Police and Vermont National Guard may be called upon through the Emergency Operations Center to assist. The commissioner of health will request the governor to declare a State of Emergency when conditions warrant.

¹ See Appendix A, Command and Control

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

3. District level: The Department of Health Division of Community Public Health maintains 12 district offices around the state. District office operations as a whole are supervised by the director of health field operations. Each district staff includes, among others, a public health nursing supervisor and a designated nurse epidemiologist. Nursing supervisors are under the overall guidance of the director of public health nursing, in the division of Community Public Health. In an infectious disease outbreak the designated nurse epidemiologists are directed by the Epidemiology Field Unit, in the division of Health Surveillance. A district director is in charge of each district office.

4. Local level: In an emergency, the highest elected official in each municipal government is responsible for the municipality's response. This is usually the mayor or the chair of the selectboard. Each municipality is responsible for having an emergency plan.

Each municipality in Vermont has a designated town health officer and an emergency manager. The health officer program manager, in the Health Department's division of Community Public Health, is responsible for coordinating town health officers. The town emergency manager has responsibility to analyze potential threats, organize local responders, and other duties.

Not all towns maintain a police department, and some employ only one or two individuals. The Vermont State Police and, on occasion, the county sheriff, provide police services in the remaining towns and are available to support the municipal forces when needed.

5. Individuals and private organizations: Many individuals and private organizations will be essential to a coordinated and effective response to a SARS outbreak:

- Physicians, nurses, and nursing home and hospital workers must be alert to the symptoms of SARS, provide screening, isolate possible cases, obtain diagnostic specimens and provide treatment and/or referral services.
- The 14 community hospitals (including one tertiary care center) and the Veterans Administration Medical Center will either admit or refer patients to appropriate isolation and treatment facilities.
- The Vermont Association of Hospitals and Health Systems maintains the Vermont Hospital Mutual Aid Agreement and participates as a member of the State Emergency Operations Center. In a large outbreak, the State EOC will coordinate medical personnel and the assignment and transport of patients with the assistance of the Vermont Association of Hospitals and Health Systems.
- Emergency squads around the state will provide ambulance transport of infectious people to appropriate isolation facilities.
- The Vermont Chapters of the American Red Cross and other relief organizations will assist with identifying or preparing facilities, activating a mechanism for providing mental health services to emergency workers, and delivering food and medicine.

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

- Home health agencies in affected areas will be asked to observe people who have been exposed to SARS for symptoms of illness, and to care for sick patients who do not need to be treated in hospitals.

II. SURVEILLANCE

Lead	Vermont Department of Health Epidemiology Field Unit: Susan Schoenfeld Vermont Department of Health Medical Epidemiologist: Lynn Zanardi Blevins
Partners	Hospital emergency departments, infection control professionals, and laboratories; primary care physicians; school nurses
Purpose	To build a surveillance system that can readily identify a suspect case at moderate to high risk of being SARS.

A. Background

The early clinical features of SARS are not specific enough to reliably distinguish it from other respiratory illnesses, and existing laboratory diagnostic tests are not adequately sensitive early in the course of illness. Therefore, a person's risk of exposure is a key factor in diagnosis: most SARS patients have had a clear history of exposure to another patient or to a specific setting with recognized SARS coronavirus transmission. During the outbreak of 2003, transmission was usually localized and often limited to healthcare settings or households. A cluster of atypical pneumonia in healthcare workers may indicate undetected SARS coronavirus transmission. Up-to-date information on the presence of SARS globally is needed to accurately assess exposure risks.

In the absence of SARS transmission worldwide, the most likely sites of recurrence are: 1) locations where transmission previously occurred; 2) the original site of introduction of SARS from animals to humans; and 3) laboratories where breaks in technique could lead to laboratory-acquired infections that might be a source of further transmission in humans. The fact that SARS infections often occur in healthcare settings, cause unusual clusters of pneumonia, and usually lead to hospitalization, provide a means to focus surveillance when known transmission is absent worldwide (i.e., patients hospitalized for pneumonia or Respiratory Distress Syndrome, pneumonia in healthcare workers, unusual clusters of pneumonia).

If SARS does return, then SARS patients or known sites of SARS transmission become the most likely source of exposure. Contact tracing – the identification of persons who had close contact with a potential case or may have been exposed while present in locations with known transmission (e.g., hospitals) – is essential for implementing appropriate measures to reduce further spread of the disease.

In a setting of extensive SARS transmission, the possibility of SARS infection should be considered in all persons with a febrile, respiratory illness, even if an epidemiologic link cannot

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

be readily established. Swift action to contain disease should be initiated when a potential case is recognized, even though information sufficient to determine case status may be lacking.

The key to controlling a SARS outbreak is promptly detecting cases and their contacts, followed by rapidly implementing control measures. Identifying SARS cases is the basic step in SARS prevention efforts, while contact tracing provides a means to focus case-finding and containment efforts on persons who are at high risk of SARS.

Surveillance goals:

- early detection of cases and clusters of respiratory infections that may signal re-emergence of SARS
- prompt and complete identification and reporting of potential cases
- prompt and complete identification of contacts

Priority Activities:

- Educating health care providers on features that can assist in recognizing SARS early, and guidelines for reporting SARS cases.
- Developing tools to identify, evaluate, and monitor contacts of SARS patients.
- Establishing an efficient data management system that can link clinical, epidemiologic, and laboratory data on SARS cases and rapidly share information.
- Identifying additional personnel (surge capacity) who can help investigate cases and identify, evaluate, and monitor contacts in the event of a large SARS outbreak.

B. SARS Case Definition and Status as a Nationally Notifiable Disease

SARS case definitions are available on the CDC website: <http://www.cdc.gov/ncidod/sars/>. Case definitions may be modified as more clinical and epidemiologic information is obtained.

This plan distinguishes between “*potential*” SARS and “*possible*” SARS as follows:

“*Potential*” SARS: In the period until known re-emergence of person-to-person transmission of SARS anywhere in the world (“Alert Level 0”), people under evaluation for clinical and/or epidemiologic features that might indicate a higher degree of suspicion for SARS infection – that is, people with severe respiratory illness who meet any of the three epidemiologic criteria listed below – will be considered “**potential**” SARS cases.

“*Possible*” SARS: After a first case of person-to-person transmission of SARS is identified somewhere in the world (“Alert Level 1”), people under evaluation for clinical and/or epidemiologic features that might indicate a higher degree of suspicion for SARS infection will be called “**possible**” SARS cases.

Respiratory illness due to SARS has been added to the list of nationally reportable diseases. SARS is also covered under Vermont's notifiable disease statute.

C. Surveillance of SARS Cases

Alert Level 0 – No person-to-person transmission of SARS confirmed in the world

Objective 1: Establish surveillance aimed at early detection of *potential* cases and clusters of respiratory infections that may signal the re-emergence of SARS.

Three characteristics might indicate a higher index of suspicion for SARS:

- In the 10 days before onset of illness, travel to or close contact with other ill people who have recently traveled to a previously affected SARS area;
- Employment as a healthcare worker providing direct patient care or in a laboratory that contains live SARS coronavirus;
- Close contact with a person recently found to have radiographic evidence of pneumonia without an alternative diagnosis.

Alert Level 1 – Person-to-person transmission of SARS confirmed in the world

Objective 2: Establish surveillance to promptly identify and report all *possible* Vermont cases to facilitate management and control of the outbreak.

The Health Department Epidemiology program will modify its surveillance efforts to incorporate available risk factor information, particularly regarding geographic transmission patterns. Through the Health Alert Network, the Physician Advisory Group, and specialized e-mail lists, the Health Department will provide information and advice to physicians, hospitals, infection control professionals, colleges, schools, workplaces, and businesses whose employees travel overseas.

Alert Level 2 – SARS confirmed in Vermont

Health Department epidemiologists will establish surveillance to promptly identify and report all new Vermont cases to facilitate management and control of the outbreak. The Health Department will enhance or accelerate surveillance activities as needed by a particular community or institution. The Health Department will initiate basic surveillance activities in areas of no or low-level SARS activity, and continue basic surveillance in areas of increased activity. The Health Department will also consider enhanced surveillance if a community or facility experiences a significant increase in number of cases, if unlinked transmission is documented or suspected, or if changing transmission patterns are identified. Enhanced surveillance activities will focus both on increasing the sensitivity of case detection through use of less specific clinical criteria when screening cases, and on evaluating suspicious illnesses regardless of the existence of a known epidemiologic link.

D. Surveillance of Contacts

Once SARS reappears, surveillance of contacts of *possible* cases is essential. Through rapid identification, evaluation, and monitoring of exposed contacts of *possible* or known SARS cases, further transmission of disease may be prevented. Contacts found to be clinically ill can be quickly isolated to avoid further transmission.

Level 0 – No person-to-person transmission of SARS confirmed in the world

Objective 1: Prepare to conduct surveillance of contacts by ensuring the availability in an emergency of additional personnel and other resources.

This will include recruiting and training Health Department personnel from outside of the Epidemiology Field Unit, and possibly personnel from outside the Health Department.

This will also include preparing a data management system for surveillance. VDH will assess database systems as they become available from CDC. Until a fully functional CDC system is available, prepare an in-house program for use if needed.

Level 1 and 2 – Person-to-person transmission of SARS confirmed in the world and Vermont

Objective 2: Identify, monitor and report all contacts of all SARS cases using proper procedures.

Infectiousness in SARS patients appears to begin with the onset of clinical illness. Although the exact duration of infectiousness is not known, it is recommended that patients with SARS avoid contact with other persons for up to 10 days after symptoms resolve. Contact tracing is systematically identifying persons who may have been exposed to patients during the infectious period. Trained interviewers will conduct interviews with all *possible* cases to identify contacts using a standardized form. Supplemental interviews will be conducted with family or household members. A proxy interview with family members will occur if the patient cannot be thoroughly interviewed in person. The Epidemiology Field Unit will mobilize other Health Department personnel, and possibly personnel from outside the Health Department.

Objective 3: Prioritize contacts on the basis of estimated risk of exposure.

In some instances, large numbers of potential contacts or resource limitations may make it impractical to perform optimum contact follow-up in a complete and timely fashion. These situations will call for prioritizing contacts on the basis of their estimated risk of exposure. The extent and timing of a contact investigation may depend on the index of suspicion and available resources, with immediate investigation warranted for newly identified confirmed or probable cases and a limited or delayed response for *potential* SARS patients with ambiguous clinical presentation and less convincing exposure.

Objective 4: Ensure adequate counseling, evaluation, and monitoring of contacts. Epidemiology will request assistance through the Incident Command System as needed to ensure adequate staff for counseling, evaluating and monitoring contacts. All interviewers

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

will be trained to use a standard script and to refer questions as needed to senior staff. A database for managing information on cases and contacts will be established with support from IT to include the capacity to document the monitoring of contacts.

III. HEALTHCARE FACILITIES

Lead	Vermont Department of Health Nurse Epidemiologist (Infection Control Professional): Nancy Thayer
Partners	Hospital emergency departments and infection control professionals, non-hospital healthcare providers and facilities, emergency medical services, Vermont Association of Hospitals and Health Systems, Vermont Nursing Home Association, Vermont Assembly of Home Health Agencies
Purpose	To provide high quality care and treatment to people with <i>possible</i> SARS infection and to prevent infection among their caretakers and fellow patients

A. Background

SARS transmission in a healthcare setting presents occupational and psychological challenges that, in the 2003 outbreaks, required heroic efforts to overcome. Experience also indicates that early detection and isolation of cases, strict adherence to infection control precautions, and aggressive contact tracing and monitoring can minimize the impact of a SARS outbreak. The success of these measures depends on thorough planning, clear communication, collaboration among disciplines, authoritative leadership, and resources sufficient to support the effort.

Part 4 Appendix C of this document provides recommendations to healthcare facilities for how to prepare for SARS. As preparedness and response activities for SARS are similar to those required for other types of emergency and mass-casualty events, planning for SARS may only require integrating SARS-specific activities into existing plans and protocols.

The following lessons from the global experience with SARS in healthcare settings have been considered in developing this plan:

- Strict adherence to Contact and Droplet Precautions, along with eye protection seem to prevent SARS transmission in most instances. Airborne Precautions may provide additional protection.
- Undetected cases of SARS in staff, patients, and visitors contribute to rapid spread of SARS.
- Optimal control efforts require continuous analysis of the dynamics of SARS transmission in the facility and the community.
- A response to SARS can push the capacity of a healthcare facility to its limits.
- The social and psychological impact of SARS can be substantial, both during and after an outbreak.
- The most effective systems for controlling a nosocomial outbreak are those that are developed and tested before an outbreak occurs.

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

- Communication needs can overwhelm and paralyze response capacity; good information management strategies are essential to an efficient and effective response.

Preparedness and response goals:

- Rapidly identify and isolate all *potential/possible* SARS patients.
- Implement strict infection control practices to prevent transmission of all respiratory pathogens.
- Strengthen communications within healthcare facilities and between healthcare facilities and the Health Department.

B. Preparedness Planning

All Vermont healthcare facilities need to be prepared for the rapid pace and dynamic features of SARS, or any other emerging infectious disease outbreak. All hospitals should be equipped and ready to care for a limited number of SARS patients as part of routine operations, and also to care for a larger number of patients in the context of escalating transmission. The Department of Health recommends the following measures for all hospitals.

Facility plans should outline the administrative, environmental, and communication measures and the individual work practices required to detect the re-emergence of SARS, prevent its spread, and manage the impact on the facility and staff. Following is a summary of CDC and Health Department recommendations to healthcare facilities. (See Appendix C for details.)

Objective 1: Develop a planning and decision-making structure that ensures the capacity of the healthcare facility to detect and respond effectively to re-emerging SARS or other infectious disease outbreak.

Objective 2: Develop a written SARS preparedness and response plan or incorporate SARS response measures into existing emergency plans.

Objective 3: Assess the capacity of the facility to respond to SARS in accordance with Appendix C of this plan.

C. Recommended Response Activities

1. Surveillance and Triage: In the absence of known person-to-person transmission of SARS confirmed in the world, surveillance for a first case will be the most important control measure. SARS case surveillance is discussed in detail in Appendix B, and surveillance in healthcare facilities is discussed in Appendix C, and includes a set of response matrices. Some key surveillance activities specific to healthcare facilities are the following:

Alert Level 0 – No person-to-person transmission of SARS confirmed in the world

Objective 1: Healthcare facilities establish surveillance aimed at detecting early any cases and clusters of respiratory infections that might signal the *potential* re-emergence of SARS.

Alert Level 1 –Person-to-person transmission of SARS confirmed in the world

Objective 2: Healthcare facilities heighten surveillance to promptly identify and report all new *possible* SARS cases that present for evaluation at the facility.

2. Clinical Evaluation of Patients: To date, no specific clinical or laboratory findings can distinguish SARS from other respiratory illnesses reliably and rapidly enough to inform management decisions that must be made soon after a patient presents to the healthcare system. Therefore, early clinical recognition of SARS still relies on specific clinical and epidemiologic criteria. Although exposure history has been a main factor in the diagnosis, many SARS patients do share some suggestive clinical characteristics. These include: presence of fever and other systemic symptoms 2 to 7 days before onset of a dry cough and dyspnea, presence of radiographic evidence of pneumonia in most patients by day 7 to 10 of illness, infrequent presence of upper respiratory tract symptoms, and lymphopenia.

Alert Level 0: No person-to-person transmission of SARS confirmed in the world

Consider as *potential* SARS patients persons under evaluation for clinical and/or epidemiologic features that might indicate a higher degree of suspicion for SARS infection, i.e., persons with severe respiratory illness with any of the three epidemiologic surveillance criteria. (See p. 6 above and Appendix B.) Evaluate and manage *potential* SARS patients in a way that protects healthcare workers, other patients, and visitors.

Objective 1: Ensure that *potential* SARS patients are evaluated using safe work practices.

Objective 2: Perform a routine evaluation of respiratory illnesses and maintain a low level of suspicion for SARS.

Alert Level 1: SARS transmission confirmed in the world:

Objective 1: Increase the level of suspicion for SARS based on the patient's symptoms and epidemiologic risk factors.

Once SARS transmission has been documented anywhere in the world, the positive predictive value of even early clinical symptoms (e.g., fever or respiratory symptoms in the absence of pneumonia), while still low, may be more acceptable if used in combination with an epidemiologic link to a setting in which SARS has been documented.

3. Infection Control and Respiratory Etiquette:

Objective 1: Reinforce basic infection control practices in the healthcare facility.

The emergence of SARS provides a reminder of the risks of nosocomial transmission of respiratory pathogens and emerging infectious diseases and an opportunity to improve

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

overall infection control in healthcare facilities. During the 2003 epidemic, public health authorities quickly recognized the importance of infection control as the primary means for containing SARS. All healthcare facilities should reemphasize the importance of basic infection control measures for the control of known and unknown respiratory pathogens.

Objective 2: Emphasize the importance of respiratory etiquette to help decrease transmission of SARS and other respiratory pathogens.

Many viral and some bacterial respiratory pathogens (e.g., influenza, adenovirus, respiratory syncytial virus - RSV, *Mycoplasma pneumoniae*) share transmission characteristics with SARS and are also frequently transmitted in healthcare settings. Implementing “respiratory etiquette” practices can decrease the risk of transmission from unrecognized SARS patients and also control the spread of other more common respiratory pathogens.

4. Patient Placement, Isolation, and Cohorting: Appropriate patient placement is a significant component of effective SARS control. Each healthcare facility should develop a strategy, with procedures to:

1. quickly separate *possible* SARS patients from other patients, and
2. implement appropriate isolation precautions.

Objective 1: Develop strategies for triage and admission that minimize the risk of transmission to staff, patients, and visitors.

Objective 2: Develop a patient transport plan to safely move *possible* SARS patients within the facility.

Objective 3: Develop and test strategies for isolating *possible* SARS patients in the healthcare facility.

Although most SARS transmission appears to occur through droplets, airborne transmission remains a possibility. Therefore, patients who require hospitalization should be admitted to an airborne infection isolation room or specially adapted SARS unit or ward where they can be managed safely.

The Vermont healthcare community will consider the need and practicality of a designated SARS hospital. In some of the 2003 outbreak areas, a logical expansion of a SARS unit or ward to cohort patients and staff was designating certain facilities as SARS hospitals. Even where this policy was successful, patients with SARS still presented to other facilities. Thus, all hospitals still needed to be vigilant for SARS and able to handle the initial triage, stabilization, and transfer of patients. The commissioner of health will designate one or two SARS hospitals after consulting with hospital leadership, the Vermont Association of Hospitals and Health Systems (VAHHS), the director of emergency management, and other community officials. The decision must take into account the availability of specialty services and support services at the designated facility and at other facilities in the area.

5. Engineering and Environmental Controls: Optimal functioning and maintenance of the facility's environment are important components of SARS control.

Objective 1: Review lockdown procedures and ensure that the air-handling capacity of rooms and units planned for housing SARS patients is adequate for isolation and infection control.

6. Exposure Reporting and Evaluation: Unrecognized SARS patients were a significant source of transmission during the SARS outbreaks. Thus, rapidly reporting and evaluating persons exposed to SARS will be an important measure in early identification and isolation.

Objective 1: Ensure that staff understands the risks of SARS exposure, the importance of reporting exposures and illness, and procedures for reporting exposures and illness.

7. Staffing Needs and Personnel Policies: A SARS outbreak challenges a healthcare facility's ability to meet staffing, organizational, and resource needs. During an outbreak of any size, existing staffing shortages may be amplified by illness among staff members, fear and concern about SARS, and isolation and quarantine of exposed staff or ill/exposed family members.

Objective 1: Develop strategies to meet the range of staffing needs that might be required to manage a SARS outbreak.

Objective 2: Ensure that infection control staffing is adequate.

Objective 3: Develop personnel policies for exposure management and work restrictions, and measures to help healthcare workers comply with restrictions.

8. Hospital Access Controls: When SARS is present in the community surrounding a healthcare facility, preventing unrecognized SARS patients from entering the facility as visitors will be essential. Controlling access to the facility will aid effective surveillance and screening.

Objective 1: Develop criteria and plans to control access to the healthcare facility including lockdown procedures. Consult local law enforcement officials in developing such criteria and plans.

9. Supplies and Equipment: Facilities will need both consumable (e.g., Personal Protective Equipment) and durable (e.g., ventilators) supplies to care for SARS patients. Experience in other countries indicates that a SARS outbreak may not only deplete a facility's supply of these resources but also may affect the suppliers' ability to fill replacement orders.

Objective 1: Determine current availability of, and anticipated need for, supplies and equipment that would be used in a SARS outbreak.

10. Communication and Reporting: A SARS outbreak will generate a need for rapid analysis of the status of patients and transmission in the healthcare facility and reporting of this

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

information to public health officials as well as to the public, the news media, and political leaders. These needs can overwhelm resources that are essential to other response activities.

Objective 1: Ensure adequate communication and coordination with the Vermont Department of Health.

Objective 2: Develop plans to communicate with other healthcare facilities, local government, and the public.

D. Community Healthcare Delivery Issues: A SARS outbreak may generate a need for resources beyond the capacity of a particular healthcare facility to deliver. These resource needs must be addressed at the community level, in collaboration with local and state agencies and provider associations:

Facilities

- Designating SARS hospitals
- Designating, developing, and staffing community SARS evaluation centers
- Constructing and certifying new airborne infection isolation rooms
- Criteria/procedures for, and impact of, closing facilities
- Establishing alternative “overflow” facilities

Personnel

- Protecting and training first responders
- Developing personnel surge capacity for heavily affected hospitals
- Coordinating volunteer efforts
- Assisting healthcare personnel in quarantine or on home work restrictions

Supplies

- Understanding the implications (e.g., fit-testing) of an emergency change in particulate respirator type during an outbreak
- Obtaining adequate supplies of Personal Protective Equipment and other equipment and materials
- Coordinating donations of needed items

Finance

- Requisitioning and distributing emergency funds to assist with construction and modifications of facilities to care for SARS patients, overtime payment for healthcare and other personnel, costs of healthcare worker furloughs, lost revenues, and other expenses

Legal/regulatory

- Enacting regulations to ensure that no facility can refuse to care for patients with SARS
- Certifying new airborne infection isolation rooms

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

- Resolving liability issues related to healthcare personnel working in jobs for which they are not specifically trained

IV. COMMUNITY CONTAINMENT

Lead	Vermont Department of Health State Epidemiologist: Cort Lohff Commissioner of Health: Paul Jarris
Partners	Town health officers, home health agencies, state and local law enforcement agencies, Agency of Human Services, Department of Public Safety/Emergency Management Division
Purpose	To prevent transmission of SARS in the community.

A. Background

Isolation and quarantine are standard practices in public health; both aim to control exposures to infected or potentially infected persons, and both raise legal, social, financial, and logistical challenges that must be anticipated and addressed.

Isolation is separating and restricting the movement or activities of ill infected people who have or are suspected to have a contagious disease (“cases”), for the purpose of preventing transmission to others. Isolation allows for the focused delivery of specialized health care to people who are ill, and it protects healthy people from becoming ill. For SARS, many sick people can be isolated at home or in a designated facility in the community, depending on their medical needs. When the sick person requires more advanced medical support, they may be isolated in a hospital. “Isolation” typically refers to actions relating to the individual patient.

Quarantine is separating and restricting movement or activities of people who are not ill but who are believed to have been exposed to infection (“contacts”), for the purpose of preventing transmission of disease. People are usually quarantined in their homes, but they may also be quarantined in facilities in the community. Quarantine can be applied to an individual or to a group of people who are exposed at a workplace or a large public gathering, or to people believed exposed on a conveyance during international travel. Quarantine can also be applied on a wider population or geographic basis. Examples of this application include the closing of local or community borders or erecting a barrier around a geographic area (“cordon sanitaire”) with strict enforcement to prohibit movement into and out of the area.

Tracing and monitoring contacts of SARS patients in order to quarantine them is resource-intensive. But it is critical for containment and early recognition of illness in persons at greatest risk of becoming infected and transmitting infection to others. Frequent communication among public health officials and healthcare providers, real-time analysis of data, and timely dissemination of information are all essential to outbreak management.

Quarantine is a collective action for the common good. Modern quarantine must not only prevent disease transmission in the community, but also ensure prompt delivery of medical care and

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

support to exposed persons, and protect individual civil liberties. During the 2003 outbreak quarantine was an integral part of SARS control in some settings with extensive transmission, and can be implemented in various ways depending on specific needs.

Quarantine does not have to be mandatory, and compliance does not have to be 100 percent for the measure to be effective. Voluntary quarantine was very effective where it was used in 2003, and very little enforcement action was needed. Effectively implementing quarantine requires a clear understanding of the roles and legal authorities of public health staff at local, state, and federal levels, and cooperating and collaborating with traditional and non-traditional partners. Obtaining and maintaining public trust is the key to successful implementation of these measures. Clear messages about the criteria, justification, role, and duration of quarantine and ways in which the state will support people during the quarantine period will help generate public trust.

Community Containment Goals:

- Reduce the risk of exposure to SARS by separating and restricting the movement of people suspected to have SARS
- Reduce the risk of transmission of SARS by restricting the movement of people who may have been exposed to infectious SARS patients but are not yet ill (i.e., “contacts”).
- Reduce the overall risk of transmission of SARS at the population level by limiting social interactions and preventing inadvertent exposures.

B. Isolation

The Vermont Department of Health will put protocols into place that will isolate SARS patients and suspect cases in their homes if they don’t need skilled medical care. Patients will be isolated in hospitals if they need hospital care, or in designated settings in the community if home isolation is not appropriate or hospital isolation is not necessary. Health Department nurses may be assigned to monitor symptoms of SARS patients in voluntary or mandatory home isolation. The Health Department may also request help from home health agencies to perform symptom monitoring. The Health Department will ask symptomatic SARS patients to isolate themselves voluntarily. If they do not comply, the Health Department will initiate legal action and enforcement. If necessary, the Health Department will request assistance from the town health officer or from law enforcement agencies.

The Health Department and the Agency of Human Services will establish the infrastructure to deliver essential goods and services to people in isolation. If the Health Department requests a person or family to isolate themselves at home, and they need outside support in order to comply, then the Health Department district director will contact one or more other Agency of Human Services department district offices, depending on the specific needs of the individual or family. The other relevant department(s) will manage the provision of such ancillary services to the family, possibly with the assistance of other community based agencies.

If the living situation of a person or family does not meet the standards for home isolation, such as private bedrooms and adequate care, and if hospital care is not needed, the Health Department will negotiate temporary access to a community-based facility. The State Emergency Operations

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

Center will provide logistical and staff support for the facility using other departments of state government such as Personnel, Buildings and General Services, etc.

C. Quarantine

During the initial SARS outbreak in 2003, CDC did not recommend, and the Vermont Department of Health did not request, quarantine of exposed contacts. However, in the event of a large SARS outbreak, or contacts with high-risk exposure, or an outbreak in which a chain of transmission cannot be identified, or other control measures have not been effective, the Health Department will consider quarantine as a means of interrupting transmission, especially if recommended by CDC.

The purpose of quarantine is to reduce transmission by separating contacts from others, monitoring them for signs and symptoms, and instituting appropriate infection control precautions as soon as symptoms are detected. Frequent monitoring (e.g., twice a day) ensures that the delay between symptom onset and instituting precautions is minimized, and separation ensures that the number of people exposed during that period is also minimized.

However, quarantine can be very complicated and very resource-intensive for public health officials to implement, and it may be inconvenient or quite difficult for those quarantined to endure. Decisions about quarantine will attempt to strike a balance between the epidemiologic situation and available resources. The Health Department will request additional personnel support from other state agencies and possibly from home health agencies and private nursing services.

D. Community-Based Control Measures

Depending on the extent of the outbreak and the availability of resources the commissioner of health will implement community-based control measures, in consultation with local government, Vermont Emergency Management, the Agency of Human Services, and the Governor's Office through the State EOC. These measures might include canceling public events, restricting mass transit, closing schools, closing public buildings, and restricting travel. The Health Department might also recommend that employers give nonessential employees several days of paid leave to stay home and avoid exposure. The objective of these measures is to reduce the risk of transmission of SARS by limiting social interactions or preventing inadvertent exposures.

E. Enforcement

Community containment measures such as quarantine are effective for controlling an outbreak even if compliance is less than perfect. Even a "leaky" quarantine will help to contain an outbreak. Optimally, quarantine applied on a voluntary basis will afford sufficient compliance to attain the necessary effect. Nevertheless, the Health Department will establish protocols for enforcing both individual and community measures when voluntary compliance is inadequate. In the case of individual isolation and quarantine measures, the commissioner of health may issue a legal health order, or may delegate this authority to the Health Department district director, or may request the town health officer to issue such an order.

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

If enforcing community-wide containment measures is necessary, the Health Department will consult with the Vermont State Police through the State Emergency Operations Center. District offices will notify local law enforcement, town officials, schools, and other community partners as needed.

V. INTERNATIONAL TRAVEL

Lead Vermont Department of Health State Epidemiologist: Cort Lohff

Partners Burlington Airport Authority, US Customs, CDC, NY, NH, Canada

Purpose To prevent the introduction of SARS into the U.S. and the exportation of SARS from the U.S.

A. Background

The rapid global spread of SARS is facilitated by international travel, as illustrated by the initial spread of the disease from China and Hong Kong in 2003. Travelers visiting affected areas are potentially at risk of infection. However, even in settings with large outbreaks, transmission is generally localized and often limited to specific settings (such as hospitals) or households of SARS patients. Consequently, the overall risk for travelers from Vermont who are not exposed to these settings is low. Nevertheless, nearly all the people in the U.S. who became infected had traveled to SARS-affected areas. Screening and evaluating travelers for symptoms and travel history, educating them about the disease, and reporting illness should therefore decrease the risk of travel-related infection. Because the virus can sometimes (although rarely) be transmitted on conveyances (such as buses and airplanes), it is also important to prevent spread from passenger to passenger and to identify and monitor contacts on the conveyance for SARS-like illness.

Because of international travel can significantly speed the spread of infectious diseases, legal authority exists at local, state, and federal levels to control the movement of persons with certain communicable diseases within and between jurisdictions. Control measures that might be used range from distributing health alert notices and health screening of arrivals, to quarantining new arrivals and restricting or prohibiting non-essential travel. Although the states have authority to restrict movement within states, federal laws govern movement between states or across international borders. Thus, airports and other ports of entry are sites of multiple overlapping jurisdictions where the interplay between various authorities must be clearly understood.

Goals of managing international travel-related SARS transmission risk:

- Prevent the introduction and spread of SARS into Vermont.
- Prevent exportation of SARS from Vermont.
- Reduce the risk of infection among Vermont travelers to SARS-affected areas.
- Prevent the spread of SARS on a conveyance as well as spread on arrival.

During the 2003 global response, the United States issued travel alerts and advisories, and distributed health alert notices to travelers arriving from areas with SARS. CDC staff met more than 11,000 direct and indirect flights from SARS-affected areas and distributed more than 2.7

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

million health alert notices to passengers arriving at airports across the country, to people arriving at 13 U.S. land border crossings near Toronto, and to departing passengers at the Toronto airport. Health alert notices informed returning travelers of potential exposure to cases of SARS. They alerted travelers to the symptoms of SARS, and advised prompt medical attention if symptoms develop. The notices also provided information and additional instructions for physicians.

CDC quarantine staff also met planes reporting an ill passenger to evaluate the passenger for possible SARS, to collect locating information on the other passengers, and to coordinate with federal and local authorities. If the ill passenger was determined to be a possible SARS case, then the locating information was provided to state and local health departments for contact-tracing.

Border and travel-related actions taken in other countries more seriously affected by SARS included pre-departure temperature and symptom screening, arrival screening (asking travelers about travel history and possible exposure to SARS), “stop lists” (maintaining lists of persons who were possible SARS cases or contacts to prevent them from traveling), and quarantine of all travelers returning from other SARS areas.

B. Preparedness Activities

Alert Level 0 - No person-to-person transmission of SARS confirmed in the world

The Vermont Department of Health will work closely with federal, state and local legal authorities, law enforcement agencies, medical providers, Province of Quebec disease control officials, and others to develop the following:

- Plans for training, mobilizing and deploying public health and other staff to meet arriving ill travelers.
- Protocols for the assessment and management of arriving ill travelers.
- Designating at least one facility for travelers who require isolation or quarantine.
- Informational materials for schools, colleges, universities, business or other organizations whose staff travel overseas, international trade offices, travel agents, and travel offices.
- Plans for imposing and enforcing movement restrictions.

C. Travelers to or from SARS-affected areas

Alert Level 1- Person-to-person transmission of SARS confirmed in the world but not Vermont

Objective 1: Reduce the risk of SARS among Vermont travelers to SARS-affected areas.

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

The Vermont Department of Health will provide guidance to travelers leaving Vermont about active SARS-affected areas and measures to reduce the risk of acquiring infection during travel.

Objective 2: Reduce the risk of importation of SARS into Vermont.

The Vermont Department of Health will request the assistance of CDC and the US Customs Service, Burlington Airport, international airlines serving Vermont, and railroad and bus companies. With their cooperation the Health Department will will:

- Provide guidance to incoming travelers from SARS-affected areas about monitoring their health and reporting illness, and screen them for SARS.
- Ensure the appropriate evaluation and management of SARS cases and potentially exposed passengers and crew members on conveyances, especially international aircraft and vehicles crossing into Vermont from Canada.

D. Travelers Leaving Vermont

Alert Level 2- SARS confirmed in Vermont

Objective 1: Reduce the risk of exporting SARS from Vermont.

If the level of SARS transmission in Vermont presents risk of exportation, the Vermont Department of Health will request that airline, airport, railroad and bus company officials screen travelers leaving Vermont to prevent such exportation. Vermont Department of Health will provide education and information needed to implement passenger screening.

VI. LABORATORY DIAGNOSIS

Lead	Vermont Department of Health Laboratory Director: Mary Celotti
Partners	Vermont hospital laboratories, Vermont Association of Hospitals and Health Systems
Purpose	To safely and accurately collect and transport specimens from hospitals to the Health Department laboratory for SARS testing, with possible relay to CDC for confirmatory testing.

A. Background

Efficient SARS-CoV diagnostic assays have been developed, but they frequently do not provide a definitive diagnosis early in illness. Although the sensitivity of current assays probably cannot be improved significantly, changes in the type, quality, and processing of specimens may improve the ability to detect SARS-CoV infection. The majority of SARS-like illnesses will be caused by other respiratory pathogens; rapid and accurate diagnosis of these infections will make

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

it easier to manage community anxiety about SARS-like illnesses. The possibility of false-positive and false-negative results with both Polymerase Chain Reaction (PCR) and serologic assays should always be considered when interpreting results; clear strategies to minimize such possibilities and to confirm test results are essential.

Laboratory diagnosis goals:

- To provide the public health community in Vermont with ready access to high-quality SARS diagnostics.
- To ensure that SARS-CoV laboratory diagnostics are used safely and appropriately and that results are interpreted appropriately.

B. Priority activities

The Vermont Department of Health expects that hospitals will collect SARS diagnostic specimens and send them by courier to the Health Department laboratory for testing. If hospitals do their own testing or send specimens to another lab, the Health Department expects that they will follow guidance provided by the Health Department laboratory.

Objective 1: To improve the ability to detect SARS infection by optimizing the selection and timing of specimen collection and specimen processing.

Objective 2: To provide SARS assays for RT-PCR testing and for serologic testing through the Vermont Department of Health Laboratory.

Objective 3: To provide guidance on laboratory safety for SARS and other respiratory diagnostic testing and for possible SARS-containing specimens submitted for other tests.

Objective 4: To provide guidance for interpreting test results, taking into account the potential for false-positive and false-negative results and the availability of applicable clinical and epidemiologic information.

Objective 5: To identify surge capacity for laboratory testing in the event of a large SARS outbreak in Vermont.

VI. COMMUNICATION

Lead Vermont Department of Health Communication Director: Nancy Erickson

Partners Health Department district offices, hospitals and health facilities, home health agencies, Vermont Emergency Management, local emergency response coordinators

Purpose To provide timely, accurate and consistent information about SARS and SARS response to Vermonters before and during an outbreak.

A. Background

During the 2003 SARS response, health communications figured prominently among the tools used to contain the outbreak. The response to outbreaks and the threat of outbreaks necessitated extensive communication activities. Experience showed that, although a media/communication plan cannot alleviate the threat of SARS or solve associated public health problems, good communication can guide the public, the media, and healthcare providers in responding appropriately and complying with exposure-control measures as required.

The Vermont Department of Health Office of Communication is responsible for coordinating and delivering public health information support during a SARS event or any other public health emergency. The Office of Communication accomplishes these duties in coordination and with the assistance of a number of organizations and agencies at the local, state, and national/international level: Centers for Disease Control and Prevention, bordering states and provinces, the Vermont Governor's Office, the Department of Public Safety/Division of Emergency Management, the Agency of Human Services, and other state agencies, as well as local Health Department offices, hospitals and health care providers, in accordance with state and federal emergency plans.

This communication plan follows proven crisis and emergency risk communication principles and reflects lessons learned during the SARS response of 2003.

Communication Goals:

- Instill and maintain confidence in the state and national system of public health
- Add to the public calm and order, and help people to take reasonable precautions
- Provide accurate, consistent and comprehensive information about SARS
- Correct rumors, inaccuracies and misperceptions quickly
- Prevent stigmatization of affected groups

Priority Activities:

- Identify key messages about SARS for specific audiences, including special needs communities, and the most effective methods to deliver these messages
- Issue public health announcements and updated information on the outbreak and response
- Provide a location for state, local and federal communication and emergency response personnel to meet and work side-by-side in developing key messages and handling media inquiries
- Anticipate and respond to frequently occurring media questions by preparing fact sheets, backgrounders, talking points (key messages), and question-and-answer documents
- Coordinate requests for spokespersons and subject matter experts

B. Communication Actions

Alert Level 0 – No person-to-person transmission of SARS in the world

Objective 1: Assess the state's readiness to meet communication needs during a SARS outbreak.

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

- Assess the information needs of healthcare providers, including hospitals and home health agencies.
- Assess the information needs of the general public.
- Assess the communication needs of special populations
- Assess logistics, personnel, equipment, resources and training needed to support emergency communication during a SARS outbreak.

Objective 2: Prepare for rapid and appropriate communication response to a global recurrence of SARS, or introduction of SARS into the United States.

- Prepare to manage emergency media demands:
 - Identify communication team functions needed in a SARS event, and personnel (with back-ups) to fill them.
 - Write communication team job action sheets.
 - Provide training needed to fulfill each job.
- Increase the range and type of educational materials for use during an outbreak.
- Establish SARS public information policy.
- Establish mechanism for review and clearance of SARS-related messages and materials.
- Identify spokespersons and subject matter experts.
- Provide spokesperson/media and crisis/emergency risk communication training.
- Update Vermont Department of Health SARS website.
- Investigate local public hotline options for SARS in addition to CDC Public Response Line. Plan for hours of operation ranging from 8 hours to 24 hours per day depending on call volume.
- Prepare to make use of local to federal assistance.
- Maintain up-to-date contact information for communication colleagues.
- Install an automated call triage system to refer public calls to the hotline.
- Help develop capacity to operate a Joint Information Center (JIC). Identify potential communicators, provide training and obtain agreements for joining a JIC.
- Identify events that will activate emergency operations and emergency communications.

Alert Level 1- Person-to-person transmission of SARS confirmed in the world but not Vermont

Objective 1: Increase knowledge and awareness of SARS and preparations being made to quickly and effectively respond in the event of a SARS outbreak.

- Prepare and move messages and materials to increase knowledge on the part of the public, health care professionals, policymakers, media and others about SARS, travelers' advisories and alerts, infection control measures, patient management strategies, community containment measures including isolation and quarantine, and laboratory diagnostics.
- Ensure availability of communications products in multiple languages.

VERMONT DEPARTMENT OF HEALTH SARS PREPAREDNESS AND RESPONSE PLAN
DRAFT 1.2 – PART 3: ORGANIZATION AND INTERAGENCY COORDINATION PLAN

Objective 2: Coordinate local/state and national/international communication efforts related to SARS.

- Consult with National Public Health Information Coalition, U.S./Canada border communications group and CDC communication colleagues to ensure a consistent and accurate communication response.
- Make contact with hospital and other partner communication colleagues. Offer Crisis and Emergency Communication (CERC) training.
- Participate in federal agency telebriefings and satellite broadcasts on SARS and with epidemiology and training unit, make available and promote these to department staff and partners.

Objective 3: Keep communication and senior management staff informed and ready with accurate, up-to-date information that is relevant to the local situation.

- Develop a “library” of SARS-related material for reference.
- Equip all communication staff with list of resources and websites relating to SARS.
- Provide information that meets the language and cultural needs of affected communities.
- Activate hotlines as appropriate
- Coordinate and maintain communication with partners.

Alert Level 2 – SARS confirmed in Vermont

Objective 1: Communicate key messages, and provide up-to-date information on global and domestic SARS activity.

- Have information ready to immediately address questions related to the first case(s) and to provide guidance to the public about disease susceptibility, diagnosis and management.
- Provide regular news releases, press conferences or telebriefings throughout the outbreak.
- In the event of a widespread outbreak, establish a Joint Information Center (JIC) in field.
- Coordinate activities with CDC’s Emergency Communication System (ECS) and federal communication liaisons.
- Enlist help of local partners in moving educational messages to local communities.
- Use website to manage information requests from the public, health care providers and the media.
- Activate hotlines as appropriate; consider 24/7 hotline.
- Provide information for travelers.