

# Prevention and Control of COVID-19 in Correctional and Detention Facilities

March 12, 2020

## Introduction

Kansas is responding to an outbreak of respiratory disease caused by a novel (new) coronavirus that was first detected in Wuhan City, Hubei Province, China and which has now been detected in 37 locations internationally, including cases in the United States. The Kansas Department of Health and Environment (KDHE) is leading these state efforts in collaboration with many state, local, and federal partner organizations. The disease that this coronavirus causes has been named “coronavirus disease 2019” (abbreviated “COVID-19”).

On January 30, 2020, the International Health Regulations Emergency Committee of the World Health Organization declared the outbreak a “public health emergency of international concern” (PHEIC). On January 31, 2020, Health and Human Services Secretary Alex M. Azar II declared a public health emergency (PHE) for the United States to aid the nation’s healthcare community in responding to COVID-19.

The following information is intended to help your jail or correctional facility prepare for and respond to the possibility of COVID-19 in your community. As with many situations, information related to the disease and appropriate measures may change and organizations are recommended to check the KDHE COVID-19 webpage for additional or updated information. In developing these plans be in communications with your county public health department including possible trigger points of when to implement these processes (e.g., community spread discussions, release planning, school closures).

## Initial Screening of Inmates

During the planning period, jails and correctional facilities should consider how to implement the following recommendations within their facility and community should person-to-person transmission occur within Kansas. Facilities should also take stock and inventory of the availability of supplies, resources, and spaces that may likely be needed to implement these recommendations.

Early identification and treatment of persons suspected or confirmed with COVID-19 is an important and effective means of preventing disease transmission. When active person-to-person transmission is occurring in Kansas, newly arrived arrestees and inmates should not be housed with other inmates until they have been appropriately screened for COVID-19. Screening within the correctional setting can help identify additional suspect COVID-19 patients while helping to promote staff health when dealing with populations.

The following evaluation should take place upon arrestee booking or initial inmate processing to the facility:

- Does the individual have a fever (subjective or confirmed)? (i.e., disposable thermometers for temperature monitoring, consider this even prior to placing in holding cells for booking)
- Does the individual have signs or symptoms of lower respiratory illness (e.g., cough or shortness of breath)?
- Has the person had close contact with a confirmed COVID-19 patient within 14 days of symptom onset?

- Has the person had travel to a country with known COVID-19 person-to-person transmission within 14 days of symptom onset?
- Has the person had any travel outside the country in the last 30 days?

Any individual reporting or with suggestive clinical features and exposure risks should be evaluated in collaboration with KDHE Infectious Disease Epidemiology staff at 877-427-7317 immediately.

## Periodic Screening of Inmates

Long-term inmates or detainees should be re-evaluated during medical rounds for clinical features and symptoms. Officers and staff should be trained and educated in evaluating for symptoms and promptly notifying medical staff or supervisors of the inmate for further medical evaluation.

## Staff Screening

This could be the facility's greatest risk for introduction of infection as they are the most in and out of the facility. Staff members may be exposed to individuals with suspected COVID-19 at the facility or while off-duty in the community. If exposed, considerations should be made to policy development to self-quarantine during infectious disease outbreaks. Maintaining a healthy workforce improves the work environment of the facility and reduces the opportunity for disease exposures to other staff and visitors.

When there is person-to-person transmission of disease within the community, the following evaluation should take place of staff:

- Does the individual have a fever (subjective or confirmed)?
- Does the individual have signs or symptoms of lower respiratory illness (e.g., cough or shortness of breath)?
- Has the person had close contact with a confirmed COVID-19 patient within 14 days of symptom onset?
- Has the person had travel to a country with known COVID-19 person-to-person transmission within 14 days of symptom onset?
- Has the person had any travel outside the country in the last 30 days?

Any individual reporting or with suggestive clinical features and exposure risks should be evaluated in collaboration with KDHE Infectious Disease Epidemiology staff at 877-427-7317 immediately.

## Visitor Screening

Visitors (including attorneys, family, friends, clergy etc.) could be a high risk for introduction of infection. Visitors may be exposed to individuals with suspected COVID-19 at the facility or while off-duty in the community.

When there is person-to-person transmission of disease within the community, the following evaluation should take place of visitors:

- Does the individual have a fever (subjective or confirmed)?
- Does the individual have signs or symptoms of lower respiratory illness (e.g., cough or shortness of breath)?
- Has the person had close contact with a confirmed COVID-19 patient within 14 days of symptom onset?
- Has the person had travel to a country with known COVID-19 person-to-person transmission within 14 days of symptom onset?

- Has the person had any travel outside the country in the last 30 days?

Any individual reporting or with suggestive clinical features and exposure risks should be evaluated in collaboration with KDHE Infectious Disease Epidemiology staff at 877-427-7317 immediately.

## **Case Reporting**

All cases of novel infectious diseases, including COVID-19, are IMMEDIATELY reportable to the KDHE Epidemiology Hotline at 877-427-7317. This line is monitored 24/7. Law enforcement, corrections, and health staff may press Option 5 to report suspect COVID-19 persons for further evaluation.

## **Respiratory Isolation**

Airborne precautions are currently recommended for any person who has influenza-like illness and screening criteria that would suggest possible exposure to COVID-19.

## **Transfer to Medical Facility**

If airborne isolation is not available in the facility, any detainee who has symptoms suggestive of COVID-19 should be immediately isolated and transferred to a facility (consider identifying other jails or correctional facilities which may have airborne isolation capabilities in advance of need) or hospital in which the detainee can be placed in an All room and evaluated promptly for COVID-19.

## **Transfer Out of Facility for Non-Medical Reasons**

Any inmate who is isolation or quarantine should not be transferred to another facility, court or work assignment. Only medically necessary transfers should be initiated with these inmates and under the guidance provided above for transfer to medical facility. Ensure with your local county health department that there is a standing order of isolation and quarantine of an individual with suspected or confirmed COVID-19 prior to any release from the facility. If an inmate is bonded out or released due to sentence completion while under isolation or quarantine orders, the local health department must be notified immediately (prior to release if at all possible) for appropriate community continuation of isolation or quarantine.

## **Environmental Controls and Personal Protective Equipment**

Primary environmental controls consist of controlling the source of infection by using local exhaust ventilation (e.g., hoods, tents, or booths) and diluting and removing contaminated air by using general ventilation. These controls help prevent the spread and reduce the concentration of airborne infectious droplets. Environmental controls work in conjunction with administrative controls such as isolation of inmates with suspected COVID-19 detected through screening. Secondary environmental controls consist of controlling the airflow to prevent contamination of air in areas adjacent to the source (All rooms) and cleaning the air (using a HEPA filter or ultraviolet germicidal irradiation [UVGI]) to increase the number of equivalent ACH. To be effective, secondary environmental controls should be used and maintained properly, and their strengths and limitations should be recognized. The engineering design and operational efficacy parameters for UVGI as a secondary control measure (i.e., portable UVGI units, upper-room air UVGI, and in-duct UVGI) continue to evolve and require special attention in their design, selection, and maintenance.

Exposure to COVID-19 within correctional facilities can be reduced through the effective use of environmental controls at the source of exposure (e.g., an infectious inmate) or in general areas.

Source-control techniques can prevent or reduce the spread of infectious droplets into the air in situations in which the source has been identified and the generation of the contaminant is localized by collecting infectious particles as they are released. Use of these techniques is particularly prudent during procedures that are likely to generate infectious aerosols (e.g., bronchoscopy and sputum induction) and when inmates with COVID-19 are coughing or sneezing.

Unsuspected and undiagnosed cases of COVID-19 contribute substantially to disease transmission within correctional facilities. When attempting to control this type of transmission, source control is not a feasible option. Instead, general ventilation and air cleaning should be relied on for environmental control. General ventilation can be used to dilute the air and remove air contaminants and to control airflow patterns in All rooms or other correctional facility settings. Air-cleaning technologies include mechanical air filtration to reduce the concentration of COVID-19 droplets and UVGI to kill or inactivate microorganisms, so they no longer pose a risk for infection.

Ventilation systems for correctional facility settings should be designed, and modified when necessary, by ventilation engineers in collaboration with infection-control practitioners and occupational health staff. Recommendations for designing and operating ventilation systems in correctional facilities have been published. The multiple types of and conditions for use of ventilation systems in correctional-facility settings and the individual needs of these settings preclude provision of extensive guidance in this document. [\*Prevention and Control of Tuberculosis in Correctional and Detention Facilities: Recommendations from CDC \(Morbidity and Mortality Weekly Report July 7, 2006/Vol. 55/ No. RR-9\*](#) pages 11 – 14 may be a useful guide for consideration of ventilation settings and environmental controls in general.

Incremental improvements in environmental controls (e.g., increasing the removal efficiency of an existing filtration system in any area) are likely to lessen the potential for COVID-19 transmission from persons with unsuspected or undiagnosed COVID-19. This information should not be used in place of consultation with experts who can advise on ventilation system and air handling design, selection, installation, and maintenance. Because environmental controls will fail if they are not properly operated and maintained, routine training and education of infection-control and maintenance staff are key components to a successful COVID-19 infection-control program.

### **Airborne Infection Isolation Rooms**

Inmates known or suspected of having COVID-19 should be placed in an All room or All cell that meets the design and operational criteria for airborne infection isolation described previously. Inmates deemed infectious should remain in isolation until transfer to a medical facility or discharge. Facilities without an on-site All room should have a written plan for referring patients with suspected or confirmed COVID-19 to a facility that is equipped to isolate COVID-19 patients.

New or renovated facilities should ensure that a sufficient number of All rooms are available consistent with the facility risk assessment. Under rare circumstances, if an All room is not available and the immediate transfer of the inmate with suspected COVID-19 is not possible, the inmate should be housed temporarily in a room that has been modified to prevent the escape of infectious aerosols outside the COVID-19 holding area. The heating, ventilating, and air-conditioning (HVAC) system in this temporary COVID-19 holding area might have to be manipulated or augmented with auxiliary exhaust fans to create an inward flow of air that reduces the potential escape of infectious aerosols. If possible, air from these areas should be exhausted directly to the outdoors. If this is not feasible, the highest filtration efficiency compatible with the installed HVAC system should be used. Filter selection based on the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 52.2 Minimum Efficiency Reporting Value (MERV)--rating efficiency tables can help in this evaluation.

Secondary air cleaning techniques (portable air cleaners and UVGI) also can be used in these areas to increase effective air cleaning. As with any decision within a secured facility, a safety risk assessment should be considered when placing temporary portable equipment in an area which inmates have access to.

### Local Exhaust Ventilation

Aerosol-producing procedures (e.g. cough producing) should be performed in an area with a type of local exhaust ventilation that captures and removes airborne contaminants at or near their source without exposing persons in the area to COVID-19. Local exhaust devices typically use hoods. Two types of hoods are used: enclosing devices, in which the hood either partially or fully encloses the infectious source, and exterior devices, in which the infectious source is near but outside the hood. Fully enclosed hoods, booths, or tents are always preferable to exterior devices because of their superior ability to prevent contaminants from escaping. When recommended exhaust ventilation hoods are not available, strong consideration should be given to moving the inmate to a secured area outside with open air, away from windows and doors to conduct aerosol-producing procedures.

Enclosing devices should have sufficient airflow to remove >99% of airborne particles during the interval between the departure of one patient and the arrival of the next. The time required to remove a given percentage of airborne particles from an enclosed space depends on 1) the ACH number, 2) the location of the ventilation inlet and outlet, and 3) the physical configuration of the room or booth. The time interval required to ensure the proper level of airborne contaminant removal from enclosing devices varies according to ACH. For example, if an enclosing device operates at six ACH, and the air inlet and exhaust locations allow for good air mixing, approximately 46 minutes would be required to remove 99% of the contaminated air after the aerosol-producing procedure has ended. Similarly, an additional 23 minutes (total time: 69 minutes) would be required to increase the removal efficiency to 99.9%. Doubling the ventilation rate decreases the waiting time by half.

<b>Air changes per hour (ACH) and time required for removal of airborne contaminants, by efficiency percentage</b>			
Minutes required for removal of airborne contaminants after infectious person has exited location			
ACH	99.0% efficiency		99.9% efficiency
	99.0% efficiency	99.9% efficiency	
2	138	207	SOURCE: Modified from the formula for the rate of purging airborne contaminants (Mutchler JE. Principles of ventilation: the industrial environment—its evaluation and control. Washington, DC: US Department of Health and Human Services, Public Health Service, CDC, NIOSH; 1973:573–82).
4	69	104	
6	46	69	
12	23	35	
15	18	28	
20	7	14	
50	3	6	

### General Ventilation

General ventilation is used to 1) dilute and remove contaminated air, 2) control the direction of airflow in a correctional facility setting, and 3) control airflow patterns in rooms. Recommended ventilation rates for correctional facility settings are typically expressed in ACH. Ventilation recommendations for

selected areas in new or renovated correctional facility settings should be followed. The feasibility of achieving a specific ventilation rate depends on the construction and operational requirements of the ventilation system and might differ for retrofitted and newly constructed facilities. The expense and effort of achieving a high ventilation rate might be reasonable for new construction but not be as feasible when retrofitting an existing setting.

Ventilation design guidance for correctional facilities and related areas has been published. This design guidance includes specific ventilation recommendations regarding total ventilation, filtration efficiency, and environmental design parameters. For minimum outdoor air supply recommendations, the guidance refers to ASHRAE Standard 62, Ventilation for Acceptable Indoor Air Quality. In 2004, ASHRAE revised and renumbered this standard to ANSI/ASHRAE Standard 62.1. For areas within correctional facilities that are not intended to contain persons with COVID-19, the recommended minimum outdoor air supply rates should meet or exceed those recommended in ANSI/ASHRAE Standard 62.1-2004. When risk analysis reveals an enhanced potential for undiagnosed cases of COVID-19, facility designers and owners may consider using higher supply rates of outdoor air (e.g., those recommended for areas within health-care facilities anticipated to contain infectious patients). Minimum outdoor air supply recommendations for health-care facilities have been published. Because correctional areas frequently will not have an exact equivalent area within the health-care environment, the designer or owner should identify an analogous health-care area from which to choose the outdoor air supply recommendation. This selection should be made based on occupant risk factors for COVID-19, occupant activities, and occupant density within the area. For example, the intake, holding, and processing area of a higher risk correctional facility might be considered analogous to the emergency waiting room area in a health-care facility. In that case, the recommended outdoor air supply would be at least two ACH.

The direction of air movement relative to adjacent areas is necessary for the containment of contaminated air. Air within a correctional facility should flow to minimize exposure of others within the building. For example, air inside an All room or cell should flow from the corridor and air-supply grille across the worker, then across that patient, and finally out of the room. To ensure that air is flowing from the corridor into an All room or cell, smoke testing should be performed daily, even if the All room or cell is equipped with a pressure-sensing device. Air flow (supply air and exhaust air) should be measured at least annually and compared with the designed air flow rates to ensure that optimal directional air flow and air exchange rates are being maintained.

## **Air Cleaning Methods**

Detailed information has been published regarding the selection, design, maintenance, and safety considerations associated with air cleaning methods (i.e., filtration and UVGI). Designers and end users should consult this information. Air removed from areas likely to contain infectious aerosols (e.g., All cells, sputum collection and other procedure rooms, and intake areas) should be exhausted directly to the outdoors to ensure that it cannot immediately reenter the building or pose a hazard to persons outside, in accordance with applicable federal, state, and local regulations. If discharging air to the outside is not feasible, HEPA filters should be used to clean the air before returning to the general ventilation system. Such recirculation is acceptable only if the air is recirculated back into the same general area from which it originated.

For general population areas in which infectious aerosols are not anticipated but might be present (from persons with undiagnosed COVID-19), total exhaust ventilation should be considered where and when the outdoor environmental conditions (temperature and humidity) are compatible with a single-pass system without undue energy or equipment costs. When recirculating air from these areas, the minimum ASHRAE-recommended level of filtration is a MERV-8 filter. However, CDC encourages

selection and use of filters with higher MERV ratings to provide an incremental improvement in the protection afforded by this mechanism. The filtration system should be designed to prevent filter bypass and to allow filter leakage testing and safe filter changes. A combination of air cleaning methods (e.g., MERV-rated filters and supplemental UVGI) may be used to increase effective air cleaning.

When used, UVGI should be applied in-duct (i.e., inside the ductwork of existing HVAC systems) or in the upper room of the area to be treated to ensure that organisms are inactivated. Upper-air systems should be designed, installed, and monitored to ensure both sufficient irradiation in the upper room to inactivate COVID-19 virus and safe levels of UVGI in the occupied space.

## **Environmental Control Maintenance**

To be most effective, environmental controls should be installed, operated, and maintained correctly. Ongoing maintenance should be part of any written infection-control plan. The plan should outline the responsibility and authority for maintenance and address staff training needs.

Failure to maintain environmental control systems properly can adversely impact control and prevention efforts at facilities in Kansas. In three multihospital studies evaluating the performance of All rooms, failure to routinely monitor air-pressure differentials (whether manually or through use of continuous monitoring devices) resulted in a substantial percentage of the rooms being under positive pressure. Correctional facilities should schedule routine preventive maintenance that covers all components of the ventilation systems (e.g., fans, filters, ducts, supply diffusers, and exhaust grilles) and any air-cleaning devices in use. A specific consideration for correctional facilities is the concern of inmates manipulating the system by blocking air supplies and ducts because often these systems may create cooler environments than are desired by the inmate. Shift to shift inspection of the air supply ducts into the cells may be necessary in some situations. Performance monitoring should be conducted to verify that environmental controls are operating as designed. Performance monitoring should include 1) directional airflow assessments using smoke tubes and use of pressure monitoring devices sensitive to pressures at 0.001 inch of water gauge (note that in the absence of proper smoke testing equipment, a tissue may be placed at the entry door to observe it being pulled strongly into the All. If the tissue is not pulled into the room or if it is blown away from the room toward the outside of the All, negative airflow is not occurring) and 2) measurement of supply and exhaust airflows to compare with recommended air change rates for the respective areas of the facility. Records should be kept documenting all preventive maintenance and repairs.

Standard procedures should be established to ensure that 1) maintenance staff notify infection-control personnel before performing maintenance on ventilation systems servicing inmate-care areas and 2) infection-control staff request assistance from maintenance personnel in checking the operational status of All cells and local exhaust devices (e.g., booths, hoods, and tents) before use. A protocol that is well written and followed will help to prevent unnecessary exposures of correctional facility staff and inmates to infectious aerosols. Proper labeling of ventilation system components (e.g., ducts, fans, and filters) will help identify air-flow paths. Clearly labeling which fan services a given area will help prevent accidental shutdowns. In addition, provisions should be made for emergency power to avoid interruptions in the performance of essential environmental controls during a power failure.

## **Respiratory Protection**

### **Considerations for Selection of Respirators**

Respiratory protection is used when administrative (i.e., identification and isolation of COVID-19 patients) and environmental controls alone have not reduced the risk for infection with COVID-19 to an acceptable level. The use of respiratory protection is most appropriate in specific settings and situations

within correctional facilities. For example, protection is warranted for inmates and facility staff when they enter All rooms, transport confirmed COVID-19 patients, and participate in cough-inducing procedures.

Respirators should be selected from those approved by CDC/National Institute for Occupational Safety and Health (NIOSH) under the provisions of Title 42, Part 84 of the Code of Federal Regulations. Decisions regarding which respirator is appropriate for a particular situation and setting should be made on the basis of a risk assessment of the likelihood for COVID-19 transmission. For correctional facilities, a CDC/NIOSH-approved N95 air-purifying respirator will provide adequate respiratory protection in the majority of situations that require the use of respirators. If a higher level of respiratory protection is warranted, additional information on other classes of air-purifying respirators and powered air-purifying respirators (PAPRs) is available. The overall effectiveness of respiratory protection is affected by 1) the level of respiratory protection selected (i.e., the assigned protection factor), 2) the fitting characteristics of the respirator model, 3) the care taken in donning the respirator, and 4) the effectiveness of the respiratory protection program, including fit testing and worker training.

### **Implementing a Respiratory Protection Program**

All facilities should develop, implement, and maintain a respiratory-protection program for health-care workers or other staff who use respiratory protection. Respiratory-protection programs are required for facilities covered by the U.S. Occupational Safety and Health Administration (OSHA). The key elements of a respiratory protection program include 1) assignment of responsibility, 2) training, and 3) fit testing. All correctional facility staff who use respirators for protection against COVID-19 must participate in the facility's respiratory protection program (e.g., understand their responsibilities, receive training, receive medical clearance, and engage in fit testing). In addition to staff members, visitors to inmates with COVID-19 should be offered respirators to wear while in All rooms and instructed on proper use. Certain regular visitors (e.g., law enforcement officials, social workers, ministers and other religious representatives, and attorneys and other legal staff) might be there in an occupational capacity. Each facility should develop a policy on the use of respirators by visitors of patients.

### **Precautions for Transporting Patients Between Correctional or Detention Facilities**

Patients with suspected or confirmed COVID-19 can be transported in a van or other automobile. The ventilation system for the vehicle should bring in as much outdoor air as possible, and the system should be set to nonrecirculating. If possible, the cab should be physically isolated from the rest of the vehicle, and the patient should be placed in the rear seat. Drivers or other persons who are transporting patients with suspected or confirmed COVID-19 in an enclosed vehicle should wear at least an N95 disposable respirator. Consideration might be given to having the patient wear a surgical or procedure mask, if possible, during transport, in waiting areas, or when others are present.

### **Cleaning and Disinfection**

Routine frequent cleaning of rooms, furniture, and utensils, and clothing used by infected individuals. Clothing/linens shall be exchanged at least twice weekly; more frequently if soiled. PPE shall be used by staff/workers handling soiled linens/laundry. Soiled linens/laundry should be placed in dissolvable bag. Cleaning of clothing/linens shall be laundered separate from general population items. Conduct frequent environmental cleaning of "high touch" surfaces such as handles, knobs, chairs, tables, etc. using EPA-registered detergent.

## Attachments

The policies developed by the Kansas Department of Corrections have been made available for consideration of others in development of individual correctional facility policies and plans.



For security and medical staff

## Instruction Bulletin: How to Respond to a Coronavirus Outbreak

### ABOUT THE 2019-NOVEL CORONAVIRUS (COVID-19)

The Kansas Department of Corrections (KDOC) is closely monitoring the outbreak of the 2019-novel coronavirus (COVID-19).

Coronavirus is a contagious virus that spreads on droplets when an infected person coughs or sneezes. In some cases, it may be spread in the stool.

Symptoms of coronavirus (Covid-19) often begin with a fever and a cough, followed by muscle aches and headache. The respiratory symptoms can abruptly worsen causing bronchitis, pneumonia, or acute respiratory distress.

A person is contagious from the onset of symptoms. Without precautions, a contagious person will pass the infection to two or three others.

On average, it takes from two days up to two weeks from an exposure for a person to develop symptoms of an infection.

There is no vaccine against the coronavirus. The best prevention is handwashing and avoidance of close contact with infected individuals.

### HOW TO ADDRESS A CORONAVIRUS OUTBREAK IN DOC

Your job during an outbreak is to help identify cases, treat or provide security for infected individuals, and prevent the spread of virus within DOC facilities. Here are the steps involved in a response:

- 1. IDENTIFY CASES:** Staff shall look for individuals who meet both of the following criteria:
  - **Clinical criteria:** fever or symptoms of lower respiratory tract infection (i.e. cough, difficulty breathing), **AND**
  - **Epidemiologic criteria:** contact with an individual who is infected with or suspected to be infected with the coronavirus.

**Note: all new remands should be asked about recent travel from out of the state.**
- 2. ISOLATE SUSPECTED CASES**
  - Anyone with symptoms of coronavirus must be placed in an isolation cell (negative pressure cell only if available).
  - Standard/Contact/Airborne precautions with directions shall be posted for anyone entering the inmate's cell.

Standard/Contact/Airborne precautions shall be used by all staff when entering the patient's cell, caring for the patient, or when transferring the patient.

- Wear appropriate PPE, including respiratory protection, when entering patient's cell.
- The patient must wear a surgical mask when moving within or outside the facility.
- Alert the medical provider to a suspected case of coronavirus. The medical staff is responsible for reporting a case that meets criteria for coronavirus to the Section of Epidemiology 1-877-427-7317.
- Contact KDHE for lab testing options at 1-877-427-7317.
- Pregnant inmates, pregnant medical staff, or pregnant security staff should not be assigned to a module or work in an area where an infected patient is housed.
- **An inmate with confirmed coronavirus should remain in isolation until cleared by a medical practitioner.**

### 3. EDUCATE STAFF AND INMATES

- Place educational flyers throughout the facility alerting inmates and staff to report any coronavirus symptoms.
- Distribute education on the signs and symptoms of coronavirus to medical and security staff.
- Instruct medical and security staff on isolation procedures for the facility and the posting of modified droplet precautions.

### 4. STOP TRANSMISSION OF VIRUS

- Movement of inmates to and from a facility with a confirmed case coronavirus should be minimized.
- Movement in and out of a module which housed an infected inmate should be minimized.
- Any room occupied by an infected individual should be thoroughly cleaned. This includes cleaning and disinfection of all surfaces.
- **Wash hands with soap and water after providing patient care, making inmate contact, or handling items used by an infected person.**

### 5. SURVEILLANCE FOR NEW CASES

- It takes fourteen days after a case of coronavirus has been confirmed to determine whether the infection has spread to others.
- Inmates and staff working should immediately report suspicion of new coronavirus cases to the medical staff.

### Coronavirus Outbreak Response Checklist

#### Screening for Patients Under Investigation (PUI) for Coronavirus Disease 2019 (COVID-19)

- Screen all new remands or transfers for symptoms or risk of COVID-19
  - **Clinical criteria:** fever and/or symptoms of lower respiratory illness (i.e. cough, difficulty breathing) [AND]
  - **Epidemiologic risk:** within the last 14 days the patient has had a history of:
    - 1) Close contact with a lab-confirmed COVID-19 patient [OR]
    - 2) History of travel from affected geographic areas (including areas in the lower 48 states) [OR]
    - 3) Unexplained febrile illness with severe lower respiratory symptoms (hospitalization for pneumonia, ARDS)
- If *epidemiologic risk only* (no symptoms), place inmate in single cell with BID monitoring for symptoms x 14 days (see quarantine information on pages 2-4) and schedule for medical provider review.
- If *both clinical and epidemiologic risk* (with symptoms), transfer inmate to single cell and alert medical provider immediately (see page 2 and continue with following checklist).

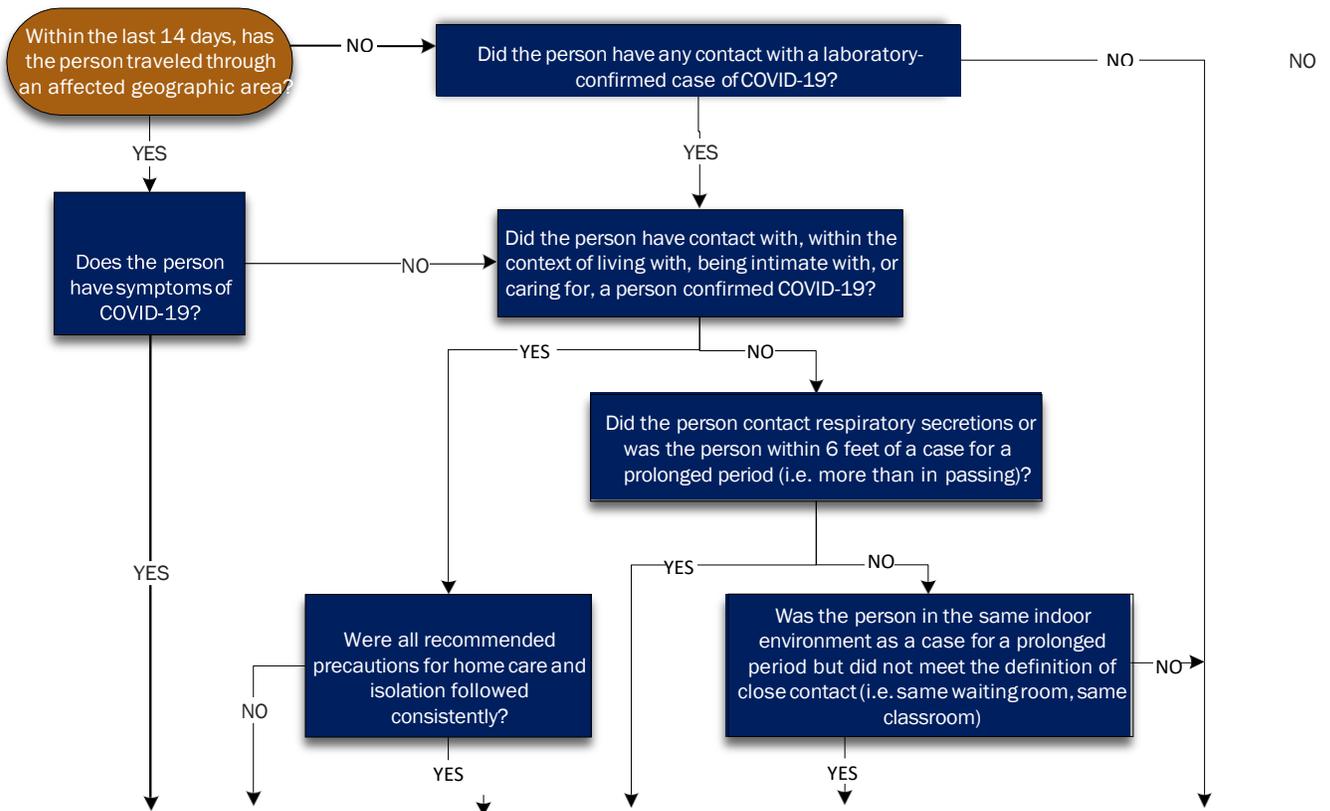
#### Isolation and Treatment of suspected case(s) of COVID-19 (PUI)

- Maintain modified droplet precautions
  - ▶ **Source control:** place a mask on the patient while in waiting area or during movement through facility.
  - ▶ **Ensure appropriate patient placement** in a single room if possible. Instruct patients to follow respiratory hygiene/cough etiquette recommendations.
  - ▶ **Use personal protective equipment (PPE).** Upon entry into patient space (< 6 feet) or exam room, staff should put on impermeable gown and gloves, a N95 mask or Powered Air Purifying Respirator (PAPR), and eye protection. Always wash hands before and after touching the patient.
  - ▶ **Limit transport and movement of PUI patients** to medically necessary purposes. If transport or movement outside of the room is necessary, instruct patient to wear a mask and follow respiratory hygiene/cough etiquette.
- Diagnosis:
  - ▶ Symptoms: Fever > 101F (83%); cough (82% patients); shortness of breath (31% patients); muscle pain (11% patients)
  - ▶ Lab: Collect three specimen types: see [CDC interim guidelines for specimen collection](#)
    - ⇒ **Upper respiratory**– collect 1 nasopharyngeal and 1 oropharyngeal swab (use separate viral transport media tubes)
    - ⇒ **Lower respiratory**– collect 2-3 mL sputum in sterile, leak-proof container with screw cap
  - ▶ Refrigerate specimen at 35°-46° F (2°-8°C) and ship overnight on ice pack to either the Kansas State Virology Lab or Kansas State Public Health Lab.
- Isolation:
  - ▶ House the patient in an individual cell if possible (negative pressure if available).
  - ▶ Movement outside the isolation cell should be avoided unless being transferred to the hospital. Patient should wear a face mask (surgical mask) during movements outside the isolation cell.
  - ▶ Use masks, gowns, gloves, and eye protection when entering cell or handling uncleaned articles moved from the cell (food trays, clothing, medical equipment, etc.) until disinfection occurs.
  - ▶ Isolation should be maintained for 21 days after onset of symptoms unless otherwise approved by the CMO or designee.
- Treatment:
  - ▶ All patients should receive supportive care with oral hydration and analgesic/antipyretic agents.
  - ▶ Initiate antibiotics for any secondary bacterial infections such as pneumonia.
  - ▶ Patients with acutely worsening symptoms or respiratory distress should be transferred to the hospital via EMS. Alert EMS staff and the receiving ER that the patient has suspected coronavirus.
- Report suspected cases:
  - ▶ **Report all suspected cases to the on-call physician.**
  - ▶ Alert the section of Epidemiology 1-877-427-7317

## Coronavirus Overview

**Cause:** Coronavirus (COVID-19)  
**Symptoms:** fever > 101F, cough, malaise, and fatigue; sudden worsening of pneumonia or acute respiratory distress syndrome (ARDS) around day 7-10.  
**Incubation:** range 2-14 days (average 5 days)  
**Contagious:** from symptom onset up to 21 days  
**Prevention:** handwashing, isolation of suspected cases, and universal precautions  
**Precautions:** universal, contact, droplet, and respiratory precautions  
**Treatment:** symptomatic treatment; antivirals in select cases

## Coronavirus Disease 2019 (COVID-19) Risk Assessment and Management of Suspected Cases in a Correctional Facility (adapted from CDC)



	HIGH RISK	MEDIUM RISK	LOW RISK	NO IDENTIFIED RISK
<b>Actions for people without COVID-19 symptoms</b>	Place in quarantine. Remain under quarantine authority. No activities in public settings.	House in single cell. Monitoring to include vital signs with temperature twice daily (~ every 12 hours). No congregate activities. Mask for transport movement outside of cell.	House in single cell. Monitoring to include vital signs with temperature twice daily (~ every 12 hours). Wear mask in congregate settings or when moving within the facility.	None
<b>Actions for people with COVID-19 symptoms</b>	Immediate isolation; medical evaluation according to PUI instructions. Pre-notify hospital/ER of any transfers. Mask for all movement outside isolation cell.	Immediate isolation; medical evaluation according to PUI guidelines. Mask for all movement outside cell.	House in single cell. Avoid congregate activities. Wear mask for any movement outside cell.	Routine medical care

**Notes:**

- (1) Report all suspected cases of COVID-19 to the on-call physician.
- (2) Examples may not cover all potential exposures to COVID-19. This algorithm should not replace clinical judgement when determining the course of action for a given case.
- (3) Unless otherwise specified, isolation or quarantine should be maintained for the duration of the incubation period (14 days).

### Kansas DOC Quarantine Implementation Overview

**Purpose:** In the event of an outbreak of a serious communicable disease, the Kansas Dept. of Corrections shall institute quarantine procedures in coordination with state and federal health officials, with the purpose of preventing the spread of disease.

**Definitions:**

Quarantine refers to the procedure of separating and restricting the movement of persons who are **not sick**, yet who were **exposed** to a contagious disease in order to quickly identify those who will become sick. The term *quarantine* is distinct from the term *isolation*.

Isolation refers to the procedure of separating a person who is already sick from others who are not ill in order to prevent the spread of disease.

Incubation period of the Coronavirus is 14 days (length of time between an exposure to an ill person and the development of symptoms in another person).

**Procedure:**

- I. The Kansas Department of Corrections is prepared to implement four levels of quarantine: 1) Individual; 2) Module; 3) Facility; or 4) Inter-Facility.
- II. The level of quarantine shall be determined by the Contracted Regional Medical Director or designee in coordination with the Secretary of Corrections or designee and the Secretary of the Department of Health and Environment.
- III. Isolation and quarantine shall be by the least restrictive means necessary to prevent the spread of a contagious or possibly contagious disease that poses a significant risk to public health.

#### LEVELS OF QUARANTINE

Level	Description	Scenario	Details
I	Individual level	Exposed individual is received into a DOC facility	Quarantine of an exposed individual to include single cell housing, in-cell meals, restriction of movement, and separation from congregate activities for duration of incubation period.
II	Module level	An ill individual is identified in a single module	Quarantine of all inmates in a module with restriction of movement to within the module, in-module meals, separation from congregate activities outside the module for the duration of the incubation period.
III	Facility level	Multiple ill individuals are identified in separate modules or areas	Quarantine of all inmates in an exposed facility to include restriction of movement to and from the facility for the duration of the incubation period.
IV	Inter-facility level	An ill individual is identified after movement between facilities during the infectious period	Quarantine of exposed inmates in multiple modules within multiple facilities with restriction of movement to and from the facilities/modules, and separation of exposed inmates from congregate activities.

**Table:** Kansas DOC levels of quarantine

Facility Control Measures During an Outbreak			
Control Measure	Outbreak Scenario		
	Isolated case	Widespread transmission (>1 case or PUI)	Quarantine
Containment Goal	Prevent spread within institution.	Prevent spread to other institutions or the public	Rapid identification and isolation of new cases
Isolation	Place the patient in an individual cell (negative pressure if available).	Place patients in individual cells if possible (negative pressure if available). Cohort confirmed cases only if necessary.	N/A
General Hygiene	Regular hand hygiene. Wash with soap and water x 20 seconds or use alcohol-based hand gel. Make soap dispensers and alcohol-based hand gel dispensers available to staff. Ensure soap available to inmates. All staff and inmates shall be instructed to avoid touching eyes, nose, or mouth.		
Personal Protective Equipment (PPE)	Provide PPE (gloves, mask, eye protection, and impermeable gown) for use by staff who are in contact with infected individuals or staff who are cleaning rooms or items used by an infected individual or PUI. Properly dispose of used PPE in biohazard waste.		
Environmental Cleaning	Routine frequent cleaning of rooms, furniture, and utensils, and clothing used by infected individuals. Clothing/linens shall be exchanged at least twice weekly; more frequently if soiled. PPE shall be used by staff/workers handling soiled linens/laundry. Soiled linens/laundry should be placed in dissolvable bag. Cleaning of clothing/linens shall be laundered separate from general population items. Conduct frequent environmental cleaning of "high touch" surfaces such as handles, knobs, chairs, tables, etc. using EPA-registered detergent.		
Screening	Screen all inmates at intake.	Screen all inmates at intake. Screen all inmates before transfer. Staff shall report suspected cases to medical.	Screen quarantined individual(s) with temperature twice daily.  Screen quarantined individuals before and after all required outside contacts.
Visitors	No unnecessary contact visitors for quarantined individual(s). All used mobile phones should be covered in plastic.		
Treatment	<ul style="list-style-type: none"> <li>▶ All patients with suspected or confirmed coronavirus should receive supportive care with oral hydration and analgesic/antipyretic agents.</li> <li>▶ Initiate antibiotics for any secondary bacterial infections such as pneumonia</li> <li>▶ Patients with acutely worsening symptoms or respiratory distress should be transferred to the hospital via EMS. Alert EMS staff and the receiving ER that the patient has suspected coronavirus.</li> </ul>		N/A
Restricted Movement	No movement of suspected or confirmed cases to include court moves. Notify Classification at Central Office: Michelle Sullivan and Melissa Waldo for coordination. Inmates scheduled for release from a facility that are isolated or quarantined, will require notification to Section of Epidemiology (public health) 1-877-427-7317. Medical staff will need to facilitate this notification and education to inmate.		
Meals	Meals provided in room with disposable utensils/plates/etc.		

Table: Facility Infection Control Measures During an Outbreak