Chelsea Raybern, MPH, Senior Epidemiologist
COVID-19 Case Investigation Training
April 2020
Coronavirus disease 2019 (COVID-19)

• Viral respiratory illness caused by SARS-CoV-2

• Causes mild to severe symptoms

• Older adults and persons with underlying medical conditions may be at higher risk for severe illness

• No treatment

• No vaccine
COVID-19 Clinical Features

• **Other symptoms**
  - Muscle aches
  - Headache
  - Sore throat
  - Loss of smell or taste

• **Complications**
  - Pneumonia
  - Multi-organ failure
  - Death

To protect and improve the health and environment of all Kansans
COVID-19 Clinical Features

- Spread person to person through respiratory droplets produced through cough, sneeze, talk

- Incubation period
- Symptom Onset
- Infectious period

*with significant improvement in other symptoms

*OR 72 hours after fever resolution*
COVID-19 Reporting and Isolation Requirements

• **K.A.R. 28-1-2 (newly recognized disease)**
  - Suspect and confirmed COVID-19 cases required to be reported within 4 hours by telephone

• **K.A.R. 28-1-6 (authorized by K.S.A. 65-128)**
  - Persons with COVID-19 (suspected or confirmed) are required to be isolated either for 10 days following onset of symptoms or 72 hours following resolution of fever (without fever-reducing meds) and significant improvement in other symptoms, whichever is longer
COVID-19 Testing

• Polymerase Chain Reaction (PCR) - preferred
  • Detects viral RNA from respiratory specimens
  • Nasopharyngeal (NP) swab is preferred
  • Intended for use in symptomatic persons

• Serology (total antibody, IgM, IgG)
  • Detects presence of antibodies from blood
  • Should not be used for diagnostic purposes or to inform infectious status
  • Positive results may be due to past or present infection with non-SARS-CoV-2 coronavirus strains
COVID-19 – Four Key Steps for Public Health

1. Initial notification of confirmed or suspected case of COVID-19

   Interview patients, walking through entire infectious period and recalling everyone they were in contact with and exposure period to determine source. Provide isolation instructions.

2. Locate and notify contacts that they have been exposed, to monitor for symptoms daily and provide linkage to care and resources. Provide quarantine instructions.

3. Monitor contacts. Daily report of symptoms and temperature for 14 days after last contact while patient was infectious.
COVID-19 Case Investigation – Call Medical Provider

1. Receive notification of lab-confirmed COVID-19 case
2. Call medical provider
3. Coordinate notification to patient
4. Obtain patient contact info
5. Obtain medical record

Notify of positive result if applicable

- Prefer to speak with infection preventionist, if applicable
- Phone number/s, address, email, next of kin contact info
- Information on symptoms, hospitalization, death

Document in EpiTrax
COVID-19 Case Investigation – Call Case

1. Call patient
2. Verify/obtain patient demographics and contact info
   - Document in Epitrax
3. Assess 14 days before sx onset, interview for sx and conditions
   - Document in Epitrax
4. Establish isolation
   - Document in Epitrax
5. Provide CRC contact info and call back #
6. Inform contact investigator will be calling

- Send text message/email/letter if no response by phone call
- Name, date of birth, phone number/s, address, email
- To determine source of exposure, identify potential clusters or outbreaks
- Provide home isolation tips document via email
- CRC=Care Resource Coordinator: provides linkage to resources (e.g. groceries, meds)
- No exemptions regardless of occupation
- Notify of positive test result if applicable

To protect and improve the health and environment of all Kansans
COVID-19 Case Investigation Timeline (Days)

**Incubation period**

-14 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 ...

**Symptom Onset**

-14 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 ...

**Infectious period**

WHICHEVER IS LONGER

OR 72 hours after fever resolution*

**Isolation**

- Symptomatic persons with unknown exposure that test negative for COVID-19 **do not** have to continue 10 day or 72 hour fever free with symptom improvement isolation and contact investigation not warranted.

*with significant improvement in other symptoms

To protect and improve the health and environment of all Kansans
COVID-19 Source of Exposure

## COVID-19 Isolation Guidance

### INSTRUCTIONS

**While awaiting test results or if you test positive for COVID-19**

<table>
<thead>
<tr>
<th>Go straight home and do not leave your home unless it is in an emergency.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid one-on-one interaction within 6-feet of another person. If possible, separate yourself from other people in your home. Stay in a different room from others and use a separate bathroom, if available.</td>
</tr>
</tbody>
</table>

**Stay in isolation while you are waiting for your results and stay in isolation if your result is positive**

You must stay away from other people and not go to work or anywhere else until you know your test results. If your test result is positive, then you will need to stay either at home or where the local health department has arranged for you to stay until it has been at least 10 days since you started feeling sick or 3 days with no fever and significant improvement in your symptoms, whichever is longer. This means that you will be in isolation for a minimum of 10 days if you are a positive case.

There are two different outcomes if your test result is negative. If you were tested because you had an exposure, for example you were a close contact of someone else who was positive for COVID-19 or you travelled somewhere where you might have been exposed, then you must finish your 14 day quarantine even if you tested negative. If you were tested and did not have an exposure, then you no longer need to be in isolation.

**Monitor your symptoms. Watch for fever, cough or trouble breathing.**

- If you become ill and need non-emergency medical attention for any reason, call your healthcare provider. Before you seek care and tell your healthcare provider that you are being tested for or are positive for COVID-19. Use a facemask before when you go the healthcare facility.

- If you are in a medical emergency and need to call 911, notify the dispatch personnel that you have been diagnosed with COVID-19. If possible, put on a facemask before emergency medical services arrive.

**Make sure you have the supplies and support you need.**

- Arrange for an appropriate caregiver and make sure to avoid direct contact. If possible, try to stock up on necessities like food or water or have it delivered by friends, family, or delivery services. Make sure to keep at least 6-feet apart when accepting deliveries.

[https://www.coronavirus.kdheks.gov/DocumentCenter/View/956/Home-Isolation-PDF---5-4-20](https://www.coronavirus.kdheks.gov/DocumentCenter/View/956/Home-Isolation-PDF---5-4-20)
COVID-19 Isolation Requirements

**RELEASING CASES AND CONTACTS FROM ISOLATION AND QUARANTINE**

**CASES**
Must be isolated for a **minimum** of 10 days after onset and can be released after afebrile and feeling well (without fever-reducing medication) for at least 72 hours, whichever is longer.

*Note: Lingering cough should not prevent a case from being released from isolation.*

**Examples:**
- A case that is well on day 2, and afebrile and feeling well for 72 hours, can be released from isolation on day 10.
- A case that is well on day 6, and afebrile and feeling well for 72 hours, can be released from isolation on day 10.
- A case that is well on day 14, and afebrile and feeling well for 72 hours, can be released from isolation on day 17.

To protect and improve the health and environment of all Kansans

COVID-19 Case Investigation – Call Case

1. Call patient
2. Notify they have been released from isolation
3. Inform if sx worsen or return after resolution to notify LHD

Provide phone number of local health department
• Open source, comprehensive disease surveillance and outbreak management database used by KDHE

• Information in EpiTrax is CONFIDENTIAL
  • Only used for COVID-19 investigation documentation and search for patient contact information
  • Cannot be shared
• IP-based firewall
  • Authentication required daily/weekly
  • Username and password: will be provided to you separately

EpiTrax – Access

Server Firewall

Your IP address, 174.234.0.34, was already whitelisted in the firewall. Go ahead and access the production site at https://ksepitrax.org/nedss/

Please contact your administrator if you run into any problems.
EpiTrax – Access

• Log in
  • Username and password: will be provided to you separately
To protect and improve the health and environment of all Kansans

EpiTrax – Locate COVID-19 Case

• Dashboard on homepage
  • Click “CMR search”
• **CMR search**
  - Obtain EpiTrax record number from local health department
  - Input EpiTrax record number in “Record Number”
  - Click “Search”
EpiTrax – Locate COVID-19 Case

- CMR search
  - Click on the case record number
EpiTrax – Accept Case/Assign Investigator

• **Event workflow**
  
  • Select “Accept Event” in upper right hand corner OR under “Workflow Options” in upper left hand corner

![Event workflow screenshot]

To protect and improve the health and environment of all Kansans
To protect and improve the health and environment of all Kansans

EpiTrax – Accept Case/Assign Investigator

- **Event workflow**
  - Select “Assign to Investigator” in upper right hand corner OR under “Workflow Options” in upper left hand corner
  - Assign your name to case from drop down menu
  - Select “Assign to Investigator”
EpiTrax – Accept Investigation

• **Event workflow**
  • Select “Accept Investigation” in upper right hand corner OR under “Workflow Options” in upper left hand corner
To protect and improve the health and environment of all Kansans

EpiTrax – Locate Healthcare Contact Information

- “Clinical” tab within COVID-19 case record
  - Locate healthcare facility/provider name
EpiTrax – Verify/Enter Case Contact Information

- “Demographic” tab within COVID-19 case record
  - Address, phone number/s, email, next of kin info
  - Sex, race, ethnicity
• “Demographic” tab within COVID-19 case record
  • Enter address
  • Address will verify after you enter “Street”, “City”, and “State”
  (automatically fill in “Zip code” and “County”)

To protect and improve the health and environment of all Kansans
• “Notes” tab within COVID-19 case record
  • Select “+ Attachment” or select “Add Attachment” under “Options”
“Notes” tab within COVID-19 case record

- Select “+ attachment uploader” and choose saved document on computer
- Select “upload the selected file(s)"
- Select “Medical Record” for “Category”
• “Clinical” tab within COVID-19 case record
  • Enter information regarding hospitalization and death
EpiTrax – Locate COVID-19 Case’s Phone Number

- “Demographic” tab within COVID-19 case record
- Locate phone number under “Telephones”
To protect and improve the health and environment of all Kansans

EpiTrax – Interview Patient for Symptoms and Exposure

• “Investigation” tab within COVID-19 case record
  • Enter information in all tabs excluding “Specimens for COVID-19 Testing”
EpiTrax – Interview Patient for Symptoms and Exposure

• “Investigation” tab within COVID-19 case record
  • If case was promoted from a contact event then have to select “2019-nCoV” form to complete for interview
  • Will be on left hand side of page under “Associated Forms”
EpiTrax – Enter Occupation

• “Investigation” tab within COVID-19 case record
  • Scroll down to bottom of page
  • Enter job title in “Occupation”
EpiTrax – Associate Case to Outbreak (if applicable)

- “Administrative” tab within COVID-19 case record
  - Select “Yes” under “Outbreak associated”
  - Select name of outbreak under “Outbreak name”
To protect and improve the health and environment of all Kansans

- **Event workflow**
  - Select “Complete Investigation” in upper right hand corner OR under “Workflow Options” in upper left hand corner
  - Interview is complete and documented, and case is no longer infectious (out of isolation)
EpiTrax – Approve Case

**Event workflow**

- Select “Approve Event” in upper right hand corner OR under “Workflow Options” in upper left hand corner
- Case interview and 14-day quarantine for contacts completed
EpiTrax Tips

• Select “Save & Continue” often while in EpiTrax
  • Between tabs
  • When selecting items that are found in searches

• Select “Save & Exit” when done entering everything into the Epitracx case
  • The record is locked while a person is entering information. “Save & Exit” unlocks the record for others.

• Make sure to complete workflow of case (accept, assign investigator, complete, approve)
COVID-19 Case Investigation Resources

• Interview scripts will be provided for case investigators

• \texttt{https://www.coronavirus.kdheks.gov/170/Healthcare-Providers}
  • Click “Local Health Departments” Tab and many resources can be found under the “Local Health Department Toolkit” and “Isolation and Quarantine” sections

• \texttt{https://www.kdheks.gov/epi/disease_investigation_guidelines.htm}
  • Click on “C” and scroll down to click on “Coronavirus Disease 2019 (COVID-19)” for links to multiple resources
Questions

Kansas Department of Health and Environment
Infectious Disease Epidemiology and Response Section
877-427-7317
kdhe.epihotline@ks.gov