Sheri Tubach

COVID-19 Contact Investigation Training

April 2020

Kansas
Department of Health and Environment
Division of Public Health

Coronavirus disease 2019 (COVID-19)

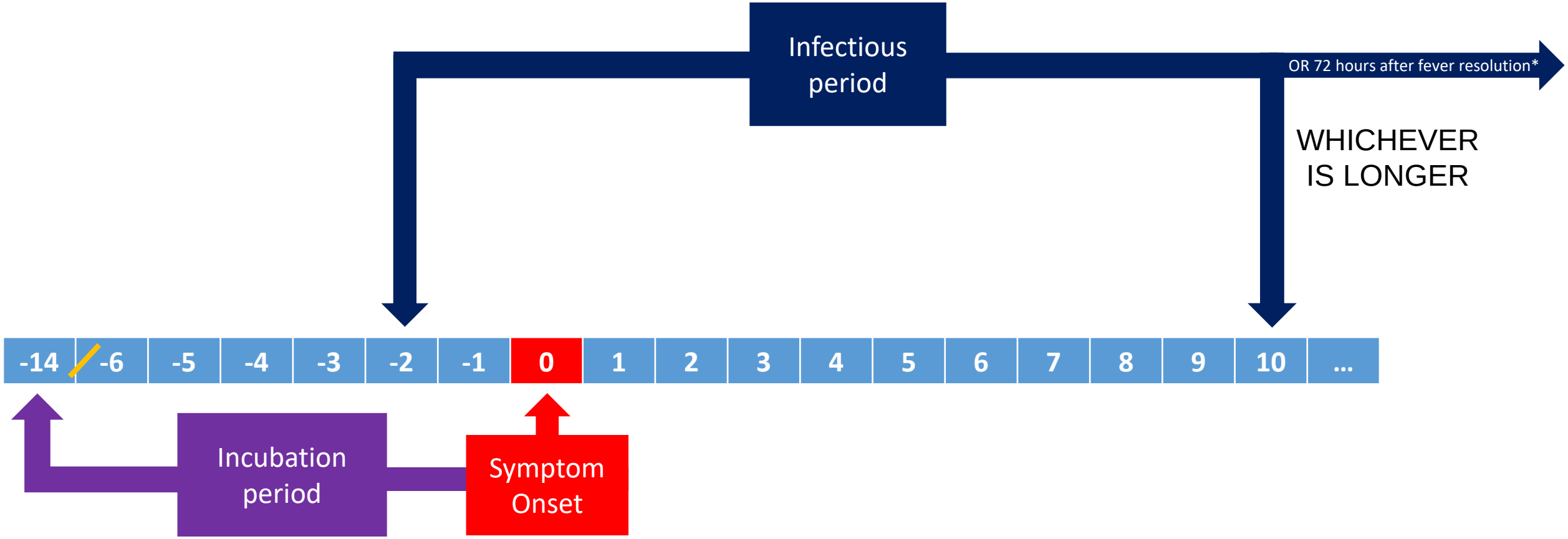
- **Viral respiratory illness caused by SARS-CoV-2**
- **Causes mild to severe symptoms**
- **Older adults and persons with underlying medical conditions may be at higher risk for severe disease**
- **No treatment**
- **No vaccine**

COVID-19 Clinical Features

- **Other symptoms**
  - Muscle aches
  - Headache
  - Sore throat
  - Loss of smell or taste
- **Complications**
  - Pneumonia
  - Multi-organ failure
  - Death

COVID-19 Clinical Features

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



*with significant improvement in other symptoms

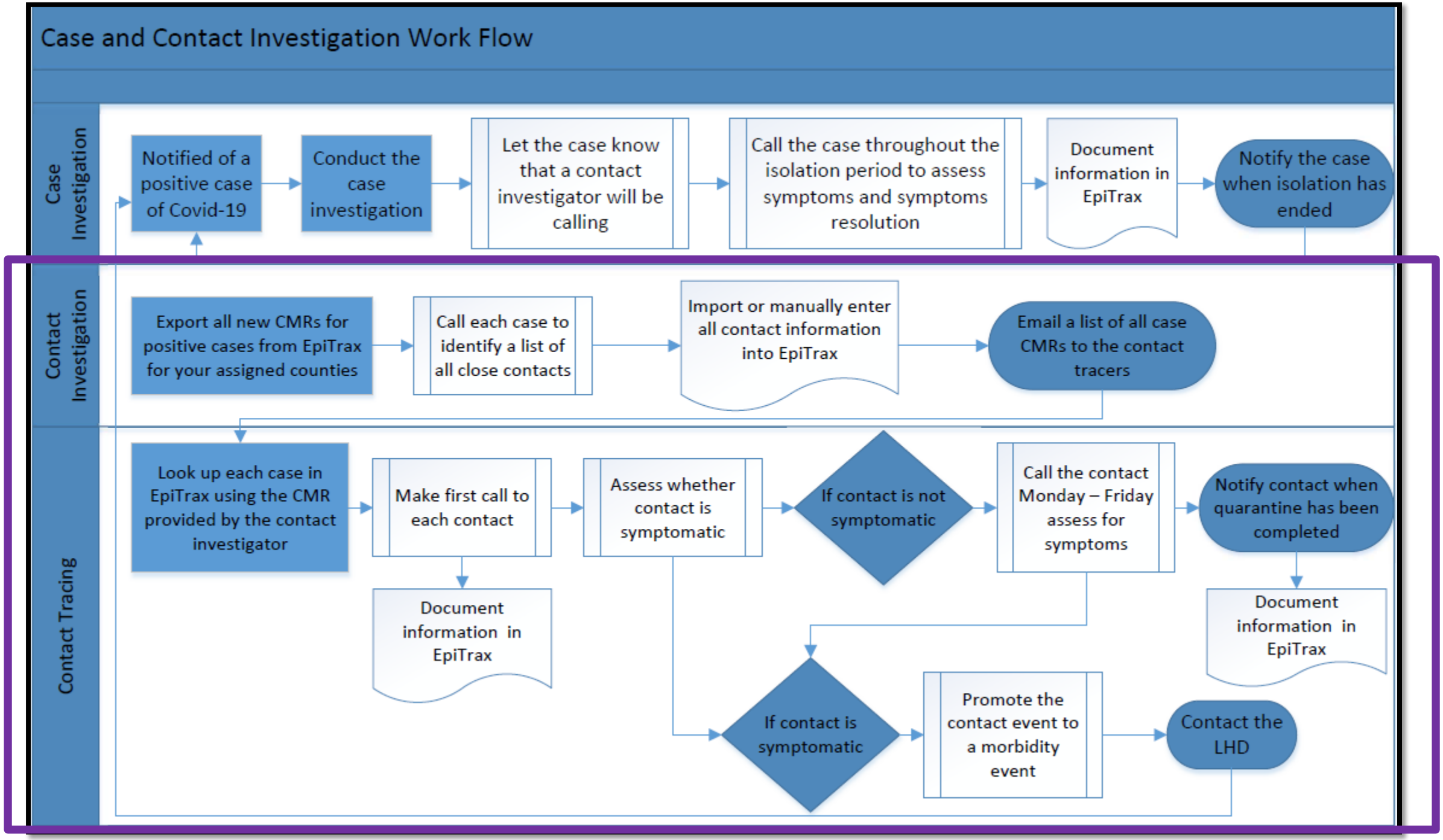
COVID-19 – Four Key Steps for Public Health

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

2. **Interview patients, walking through entire infectious period and recalling everyone they were in contact with. Provide isolation instructions.**

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

4. **Monitor contacts. Daily report of symptoms and temperature for 14 days after last contact while patient was infectious.**


Case and Contact Investigation Work Flow
Case Investigation
Notified of a positive case of Covid-19
Conduct the case investigation
Let the case know that a contact investigator will be calling
Call the case throughout the isolation period to assess symptoms and symptoms resolution
Document information in EpiTrax
Notify the case when isolation has ended
Contact Investigation
Export all new CMRs for positive cases from EpiTrax for your assigned counties
Call each case to identify a list of all close contacts
Import or manually enter all contact information into EpiTrax
Email a list of all case CMRs to the contact tracers
Contact Tracing
Look up each case in EpiTrax using the CMR provided by the contact investigator
Make first call to each contact
Document information in EpiTrax
Assess whether contact is symptomatic
If contact is not symptomatic
Call the contact Monday – Friday assess for symptoms
Notify contact when quarantine has been completed
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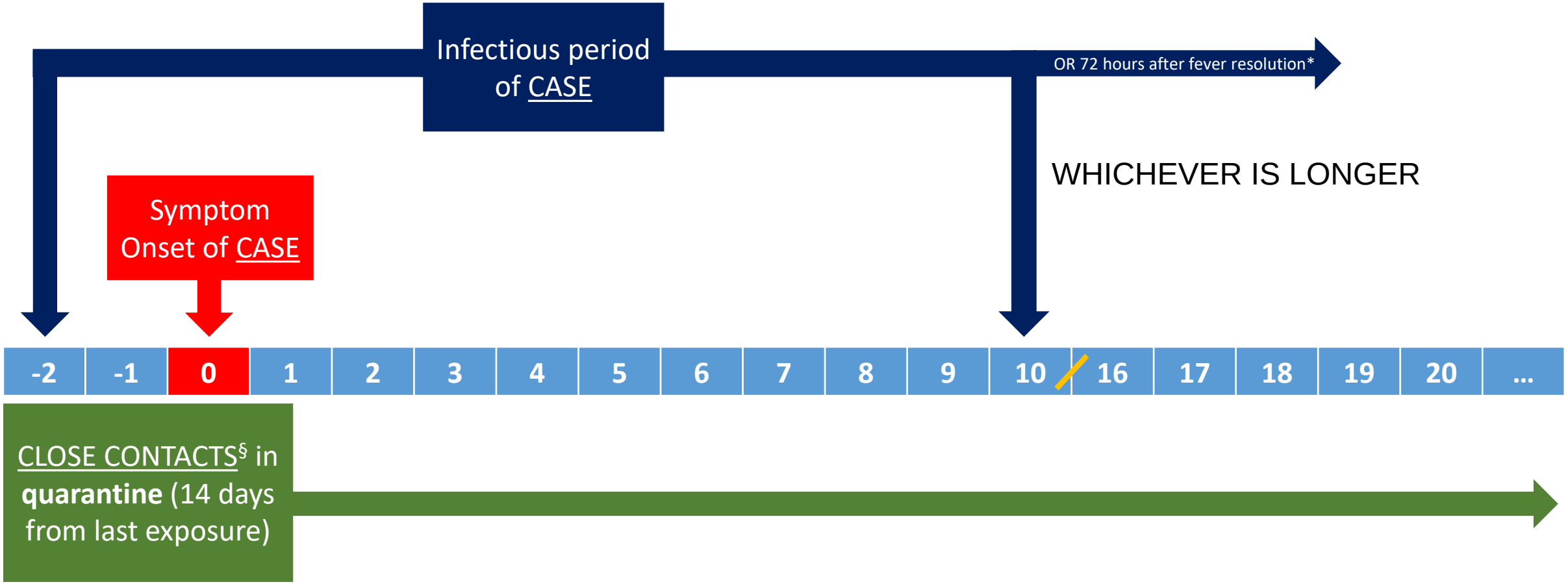
If contact is symptomatic
Promote the contact event to a morbidity event
Contact the LHD

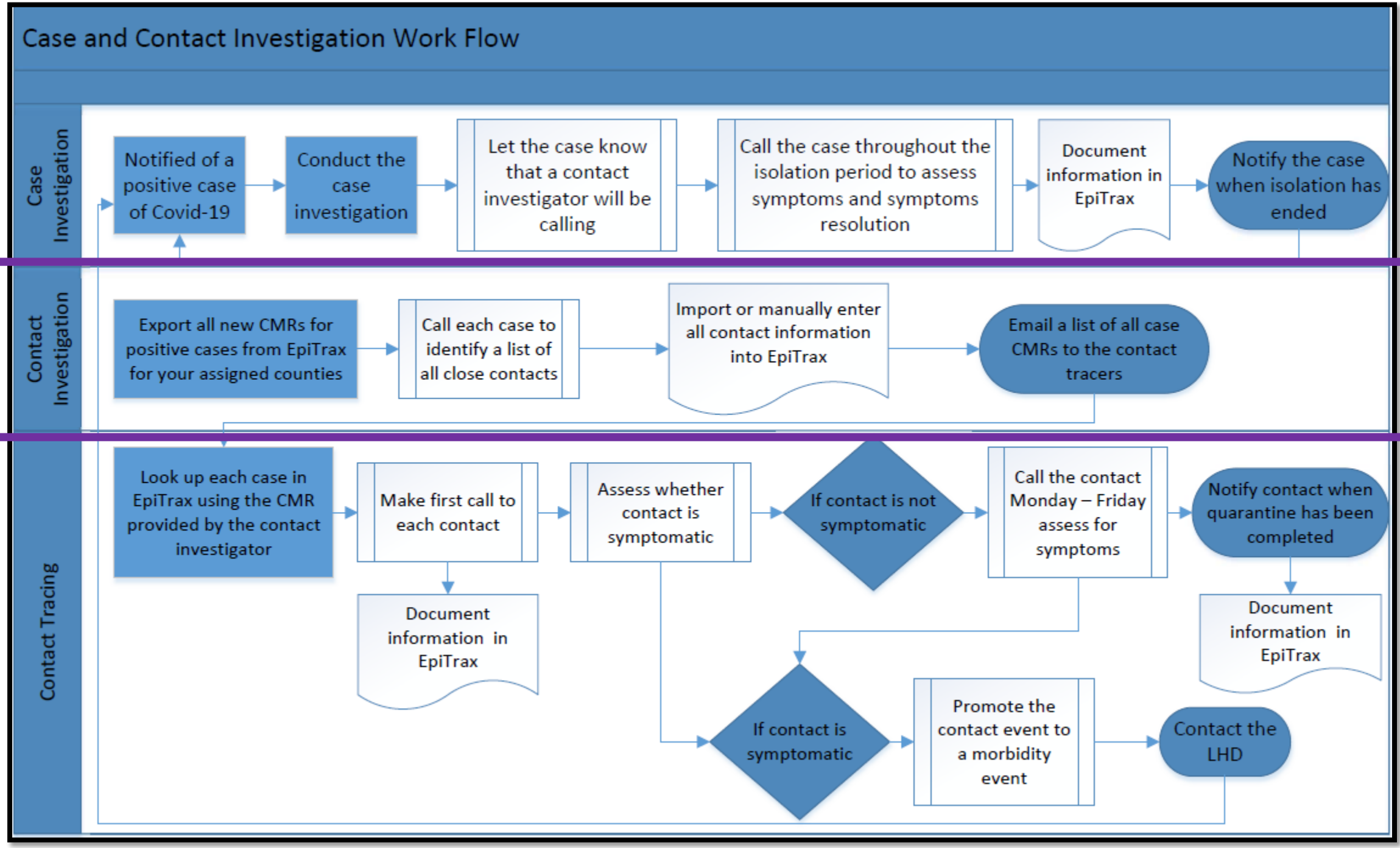
COVID-19 Contact Investigation Timeline (Days)



*with significant improvement in other symptoms

§ defined as being within 6 feet for 10 minutes or longer or having direct contact with infectious secretions of a COVID-19 case (e.g. coughed on). For constant exposure (e.g. household contacts), quarantine doesn't start until case is considered no longer infectious. If close contact develops symptoms and tests positive for COVID-19 (or is never tested), treat as case and conduct case and contact investigation – make sure household contacts quarantine starts over and identify any new close contacts.

-Symptomatic close contacts that test negative for COVID-19 **do** have to continue 14 day quarantine.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COVID-19 Contact Investigator Responsibilities – Call Case

Export COVID-19 cases from EpiTrax → **Call each case to identify close contacts** → **Obtain name, email, phone numbers, address** → **Create contacts in EpiTrax** → **Assign cases to contact tracer to conduct contact follow up**

Created and saved by KDHE. Pull report daily Monday-Friday.

THINK
- Household members
- Intimate partners
- Healthcare workers
- Friends
- Non-household family
- Coworkers

Make three call attempts different times of day – if no response, inform LHD

For missing contact information try:

Google, LexisNexis, whitepages SEARCH. FIND. KNOW., LinkedIn, EpiTrax

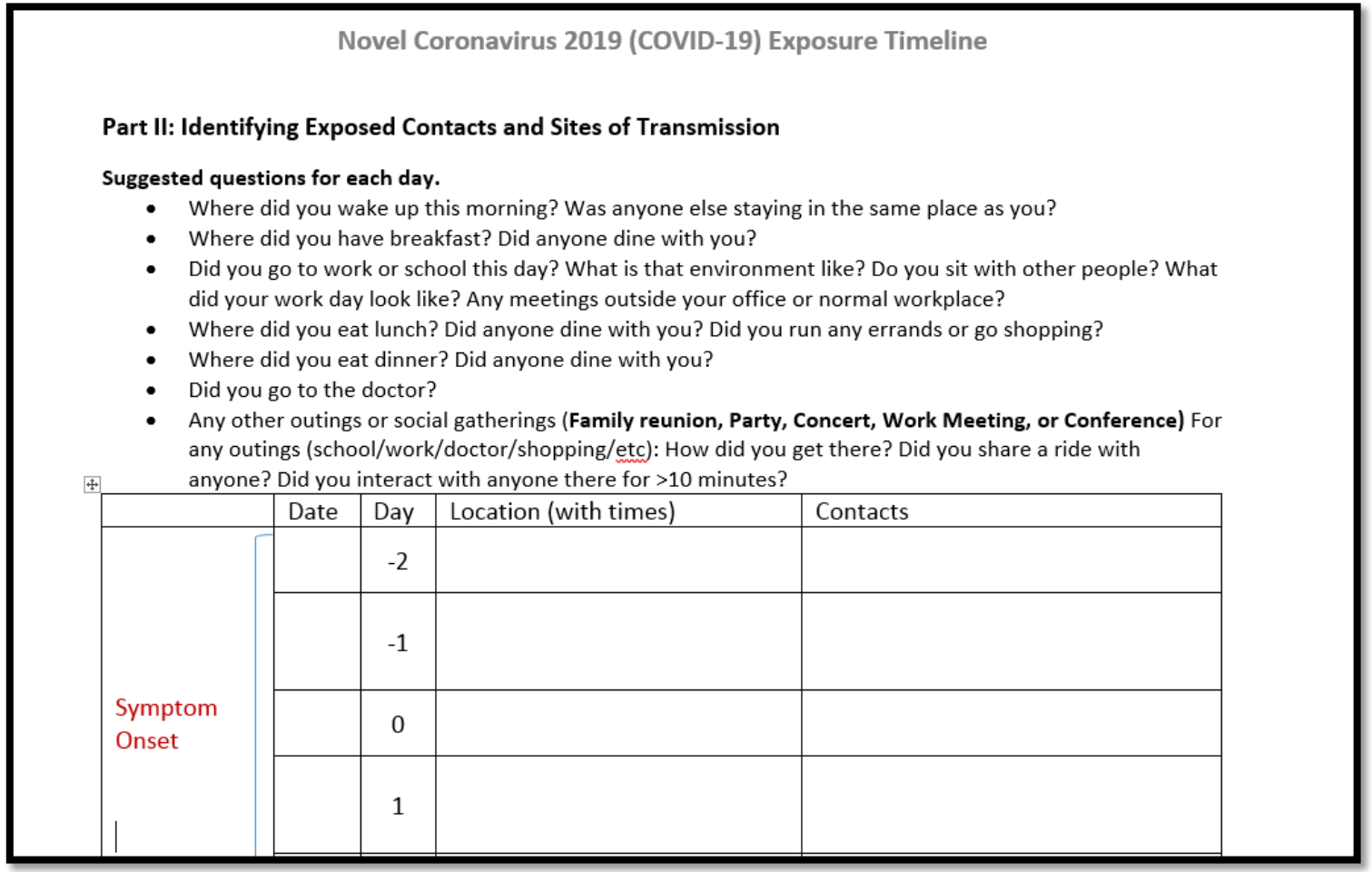
Can import for multiple contacts or enter manually

Identify contact type (e.g. household, healthcare) and date of last exposure

Email case record numbers from EpiTrax

COVID-19 Contact Investigator Responsibilities – Identifying Close Contacts

- **Close contact:**
  - Within 6 feet of infectious case for ≥10 minutes
  - Direct contact with respiratory secretions of infectious case (e.g., cough, sneeze)



Novel Coronavirus 2019 (COVID-19) Exposure Timeline

Part II: Identifying Exposed Contacts and Sites of Transmission

Suggested questions for each day.

- Where did you wake up this morning? Was anyone else staying in the same place as you?
- Where did you have breakfast? Did anyone dine with you?
- Did you go to work or school this day? What is that environment like? Do you sit with other people? What did your work day look like? Any meetings outside your office or normal workplace?
- Where did you eat lunch? Did anyone dine with you? Did you run any errands or go shopping?
- Where did you eat dinner? Did anyone dine with you?
- Did you go to the doctor?
- Any other outings or social gatherings (**Family reunion, Party, Concert, Work Meeting, or Conference**) For any outings (school/work/doctor/shopping/etc): How did you get there? Did you share a ride with anyone? Did you interact with anyone there for >10 minutes?

	Date	Day	Location (with times)	Contacts
Symptom Onset		-2		
		-1		
		0		
		1		

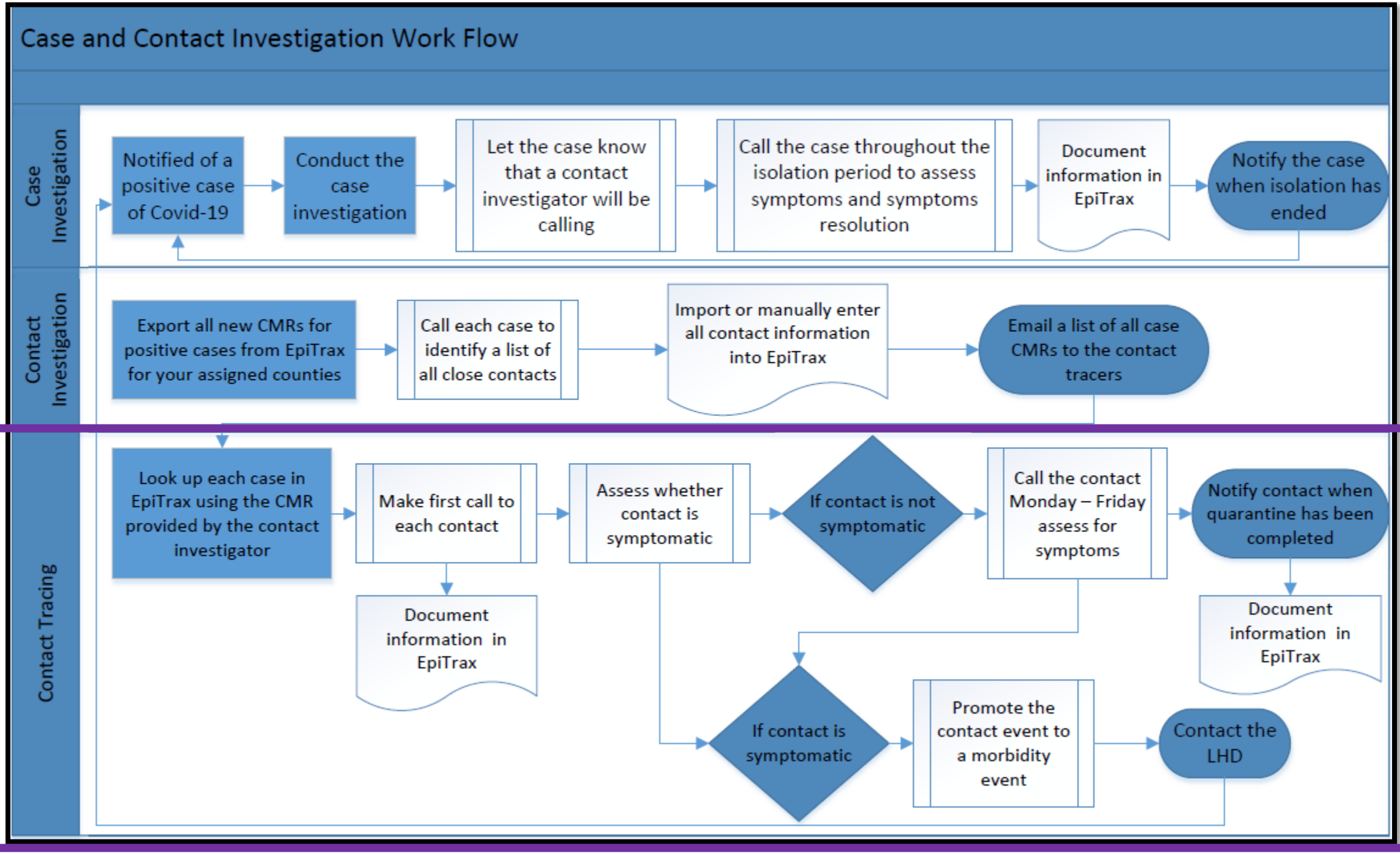
https://www.kdheks.gov/epi/download/Novel_Coronavirus_2019_COVID-19_Exposure_Timeline.pdf

COVID-19 Contact Investigator Responsibilities – Contact Type

- **If close contact works in healthcare, law enforcement, or public health then notify the local health department***

- **Local health department will consult with contact's employer to determine if contact needs to continue to work through quarantine**

*Other sectors considered critical infrastructure (https://www.cisa.gov/critical-infrastructure-sectors) may be included in this determination by public health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COVID-19 Contact Tracer Responsibilities – Call Close Contact

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Division of Public Health

Locate COVID case/s in EpiTrax for contact/s → Call close contact/s to notify of exposure → Verify all contact information, collect date of birth → Assess for symptoms → Establish/maintain 14-day quarantine, inform of daily contact → Provide with sx monitoring info, call back #, and CRC contact info

Document in EpiTrax (Verify all contact information, collect date of birth)

Document in EpiTrax (Assess for symptoms)

Document in EpiTrax (Establish/maintain 14-day quarantine, inform of daily contact)

- Utilize EpiTrax case record number/s from email
- All contacts to be notified anonymously (don't reveal identity of patient and don't confirm if asked)
- If ill, notify the local health department (LHD) for case investigation
- Call Monday-Friday. Make three call attempts different times of day – if no response, inform LHD

Provide quarantine guidelines document via email if have KDHE email

- Temperature check 2x daily and alert for other sx

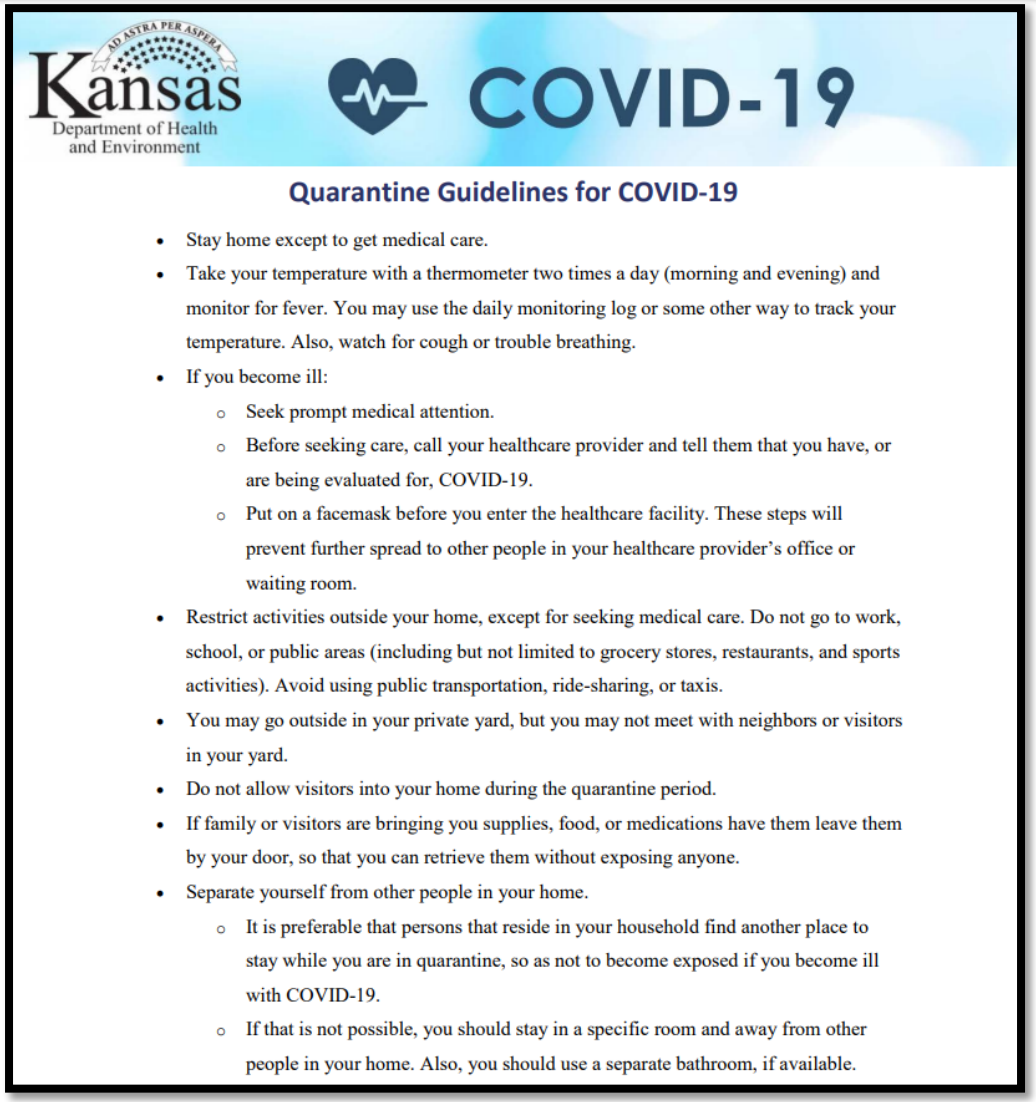
CRC=Care Resource Coordinator: provides linkage to resources (e.g. groceries, meds)

COVID-19 Contact Tracer Responsibilities – Symptom Assessment

- **Symptom criteria to suspect COVID-19 in close contact**
  - Fever only OR
  - At least two of the following symptoms:
    - Fever
    - Chills
    - Rigors (exaggerated shivering)
    - Muscle aches
    - Malaise (weakness, discomfort)
    - Headache
    - Sore throat
    - Cough
    - Shortness of breath
    - Loss of smell or taste
    - Diarrhea (without a more likely diagnosis)

COVID-19 Contact Tracer Responsibilities – Quarantine Requirements

- **K.A.R. 28-1-6 (authorized by K.S.A. 65-128)**
  - Close contacts of persons with COVID-19 (suspected or confirmed) are required to be quarantined for 14 days following last exposure
  - If persons refuse quarantine, notify LHD to authorize legal order



Kansas Department of Health and Environment

COVID-19

Quarantine Guidelines for COVID-19

- Stay home except to get medical care.
- Take your temperature with a thermometer two times a day (morning and evening) and monitor for fever. You may use the daily monitoring log or some other way to track your temperature. Also, watch for cough or trouble breathing.
- If you become ill:
  - Seek prompt medical attention.
  - Before seeking care, call your healthcare provider and tell them that you have, or are being evaluated for, COVID-19.
  - Put on a facemask before you enter the healthcare facility. These steps will prevent further spread to other people in your healthcare provider's office or waiting room.
- Restrict activities outside your home, except for seeking medical care. Do not go to work, school, or public areas (including but not limited to grocery stores, restaurants, and sports activities). Avoid using public transportation, ride-sharing, or taxis.
- You may go outside in your private yard, but you may not meet with neighbors or visitors in your yard.
- Do not allow visitors into your home during the quarantine period.
- If family or visitors are bringing you supplies, food, or medications have them leave them by your door, so that you can retrieve them without exposing anyone.
- Separate yourself from other people in your home.
  - It is preferable that persons that reside in your household find another place to stay while you are in quarantine, so as not to become exposed if you become ill with COVID-19.
  - If that is not possible, you should stay in a specific room and away from other people in your home. Also, you should use a separate bathroom, if available.

https://www.kdheks.gov/epi/download/Quarantine_Guidelines.pdf

COVID-19 Contact Tracer Responsibilities – Quarantine Requirements

Kansas Department of Health and Environment
*Adapted from TN Dept of Health

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.

HOUSEHOLD CONTACTS

Must be quarantined for 14 days after the case has been afebrile and feeling well (because exposure is considered ongoing within the house).

If a household contact develops symptoms, they should be tested.

This means that household contacts may need to remain at home longer than the initial case.

Examples:

- A case is well 3 days after onset. The household contact must remain quarantined until day 20.
- A case is well 7 days after onset. The household contact can be released on day 24.
- A case is well 14 days after onset. The household contact can be released on day 31.

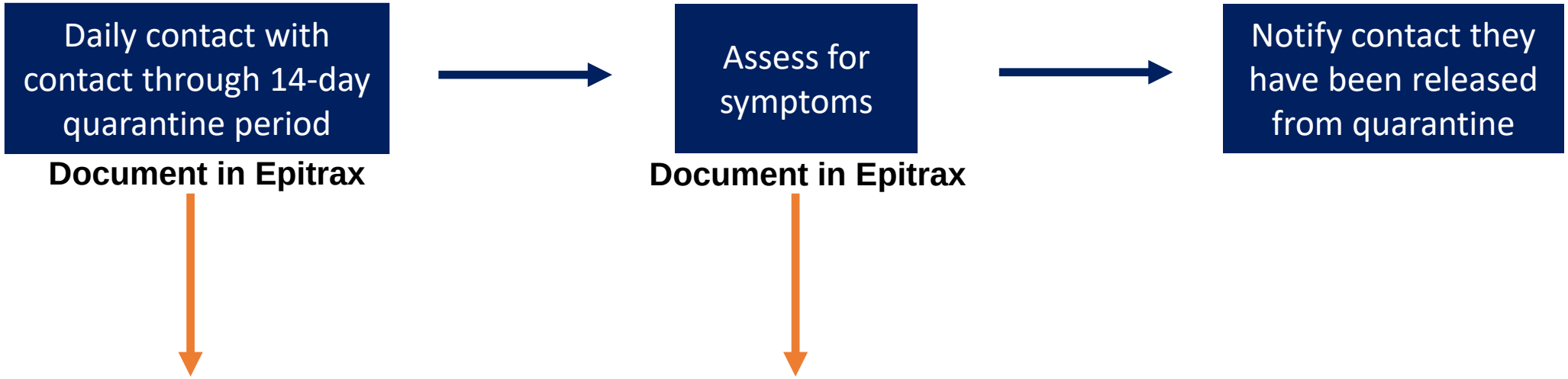
NON-HOUSEHOLD CONTACTS

Must be quarantined for 14 days from the date of last contact with the case.

5/1/20

https://www.coronavirus.kdheks.gov/DocumentCenter/View/368/Releasing-Cases-and-Contacts-from-Isolation-and-Quarantine-PDF---5-1-20

COVID-19 Contact Tracer Responsibilities – Call Close Contact



Assign daily tasks in EpiTrax for follow-up reminder and documentation

Call Monday-Friday, do not need to call on weekends. Inform contact if sx develop in between follow-up, need to call you

If ill, notify the local health department for case investigation

COVID-19 Contact Tracer Responsibilities – Monitoring Symptoms in Quarantine

DAILY FEVER SELF-MONITORING LOG

Monitor yourself for fever (>100.4°F,38°C) twice daily for 14 days. Mark the date, time you took your temperature (mark whether it was AM or PM), and temperature. Monitor yourself for the symptoms listed below daily, as well. If you develop any of the symptoms immediately call your local health department. If you need immediate care in an emergency department notify EMS that you may have been exposed to COVID-19.

Day	Date	Time Taken	Temperature	Day	Date	Time Taken	Temperature
1		_____ □AM□PM	_____ °F	8		_____ □AM□PM	_____ °F
		_____ □AM□PM	_____ °F			_____ □AM□PM	_____ °F
2		_____ □AM□PM	_____ °F	9		_____ □AM□PM	_____ °F
		_____ □AM□PM	_____ °F			_____ □AM□PM	_____ °F
3		_____ □AM□PM	_____ °F	10		_____ □AM□PM	_____ °F
		_____ □AM□PM	_____ °F			_____ □AM□PM	_____ °F
4		_____ □AM□PM	_____ °F	11		_____ □AM□PM	_____ °F
		_____ □AM□PM	_____ °F			_____ □AM□PM	_____ °F
5		_____ □AM□PM	_____ °F	12		_____ □AM□PM	_____ °F
		_____ □AM□PM	_____ °F			_____ □AM□PM	_____ °F
6		_____ □AM□PM	_____ °F	13		_____ □AM□PM	_____ °F
		_____ □AM□PM	_____ °F			_____ □AM□PM	_____ °F
7		_____ □AM□PM	_____ °F	14		_____ □AM□PM	_____ °F
		_____ □AM□PM	_____ °F			_____ □AM□PM	_____ °F

You should also monitor yourself daily for the following symptoms. The symptoms can also be recorded daily on the chart on the next page.

□ Fever (>100.4°F,38°C) □ Chills or severe shivering (rigors) □ Muscle Aches □ Weakness or malaise □ Headache
□ Sore throat □ Cough □ Shortness of breath □ Difficulty breathing
□ New loss of smell or taste disorder □ Diarrhea

https://www.coronavirus.kdheks.gov/DocumentCenter/View/136/Daily-Medical-Monitoring-Log-PDF---4-24-20

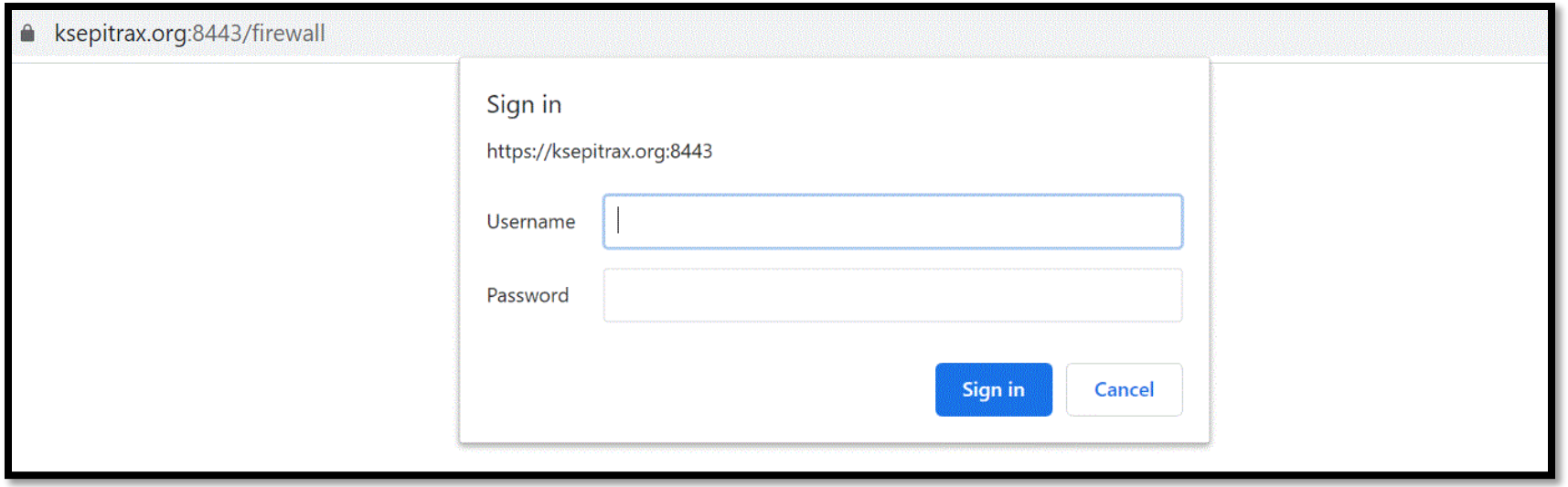
EpiTrax

- **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

EpiTrax – Access

- **IP-based firewall**
  - Authentication required daily/weekly
  - Username and password: will be provided to you separately



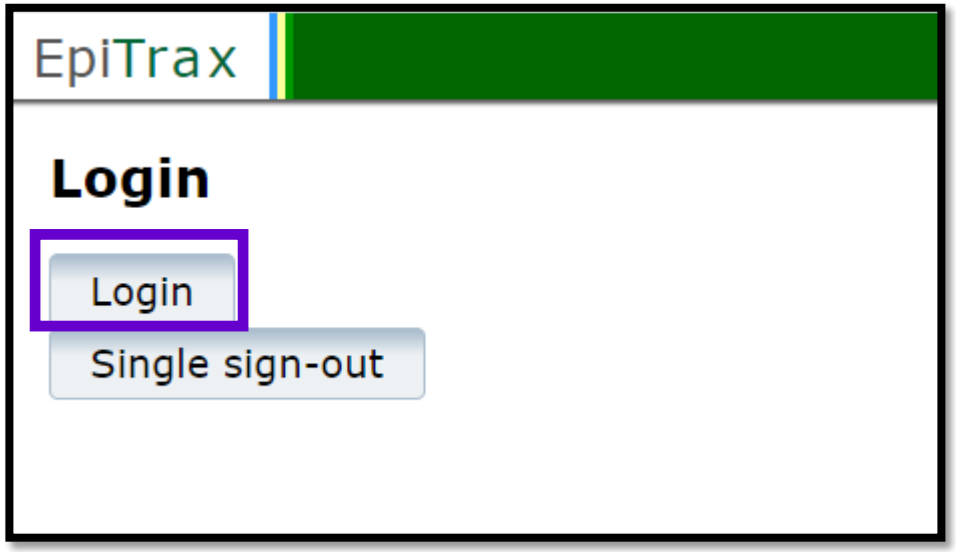
Server Firewall

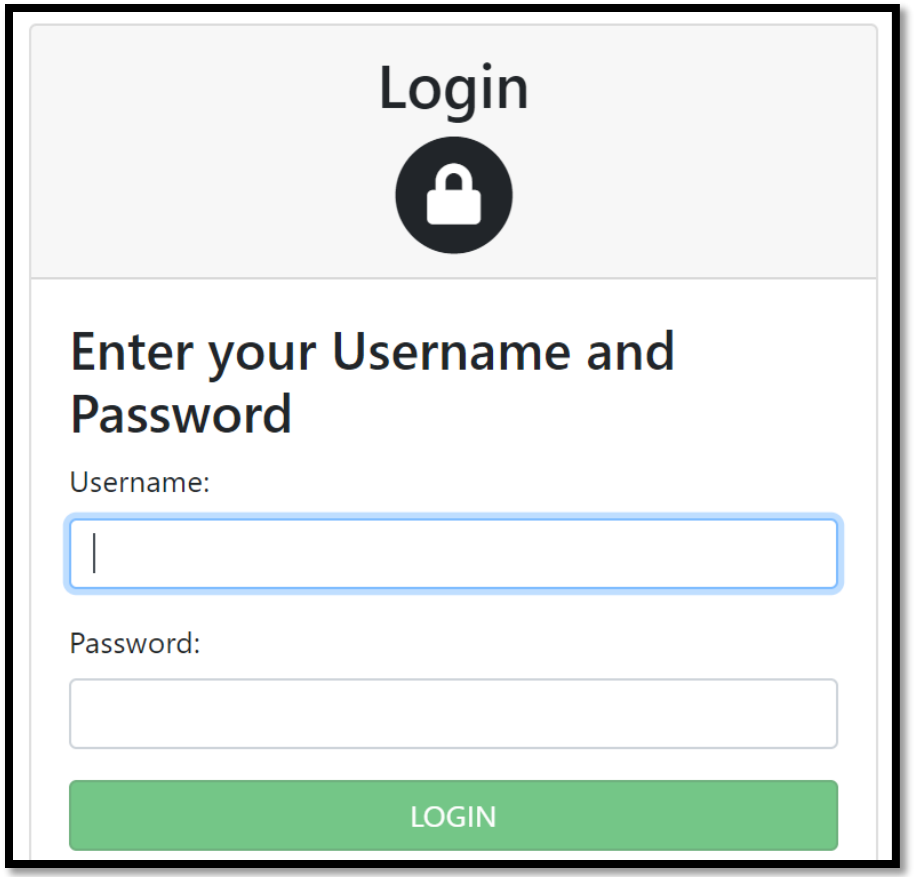
Your IP address, 174.234.0.34, was already whitelisted in the firewall. Go ahead and access production site at https://ksepitrax.org/nedss/

Please contact your administrator if you run into any problems.

EpiTrax – Access

- **Log in**
  - Username and password: will be provided to you separately





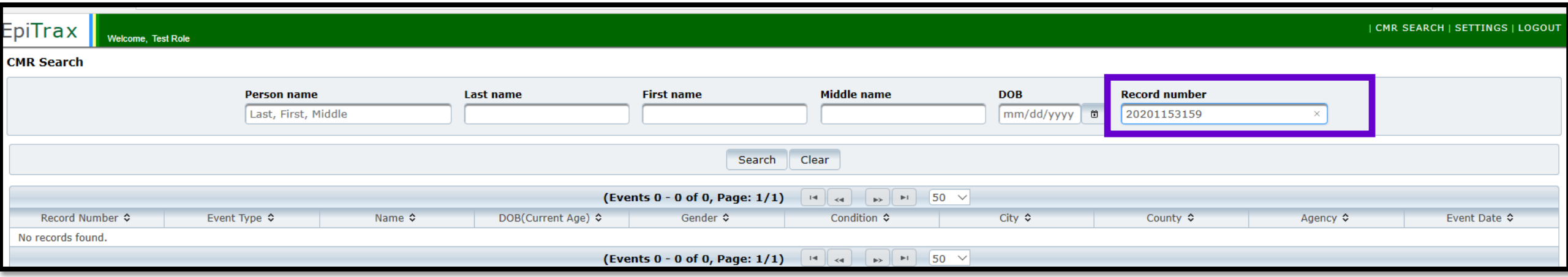
Contact Investigator Responsibilities

EpiTrax – Locate COVID-19 Case

- **Dashboard on homepage**
  - Click “CMR search”

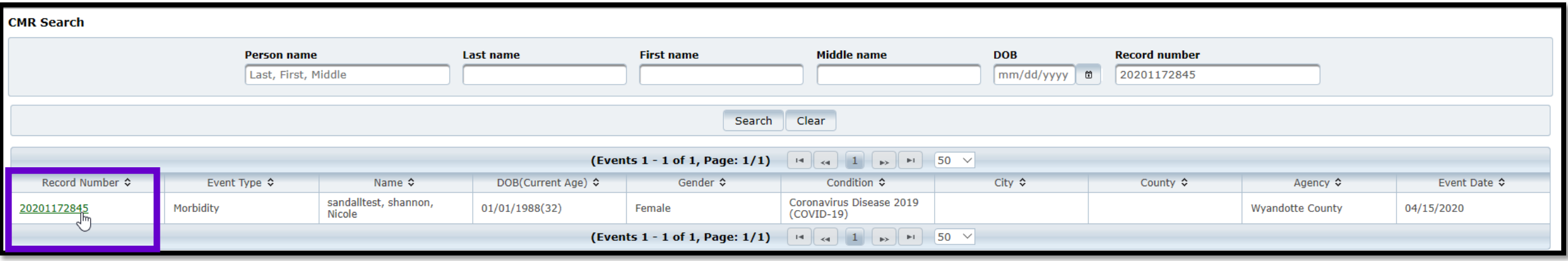
EpiTrax – Locate COVID-19 Case

- **CMR search**
  - Obtain EpiTrax record number from local health department
  - Input EpiTrax record number in “Record Number”
  - Click “Search”



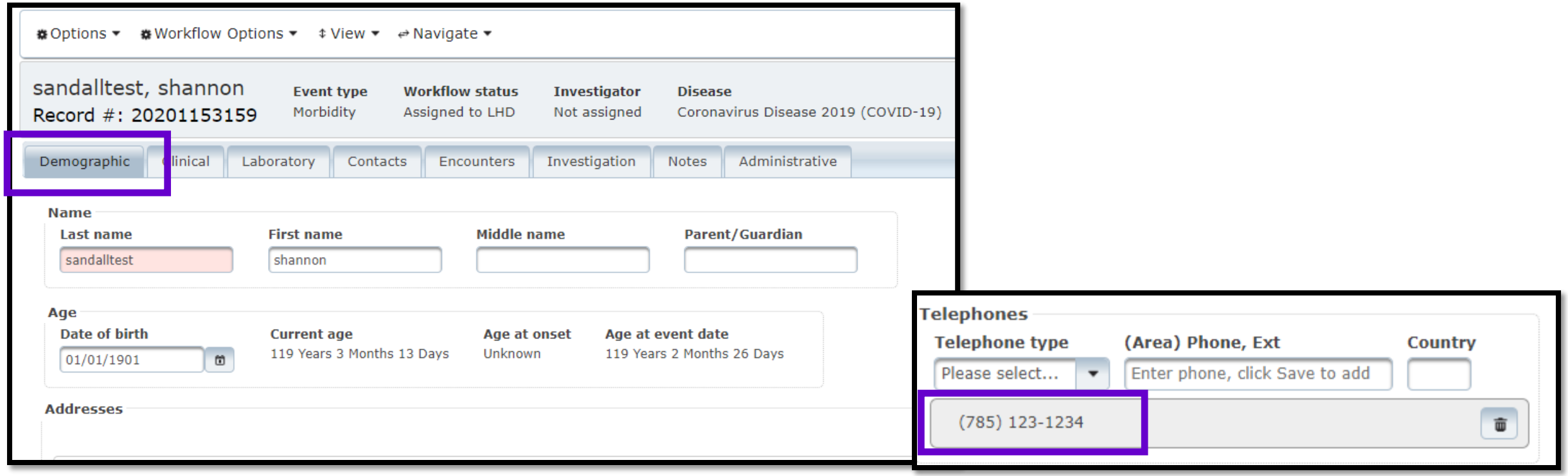
EpiTrax – Locate COVID-19 Case

- **CMR search**
  - Click on the case record number



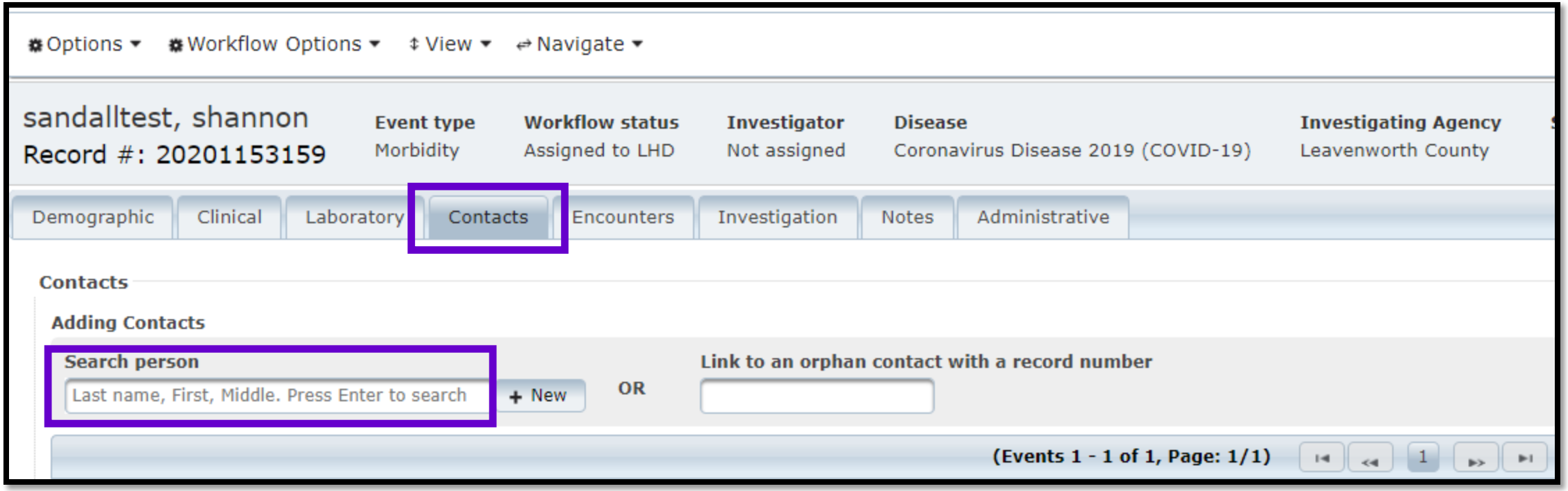
EpiTrax – Locate COVID-19 Case's Phone Number

- **"Demographic" tab within COVID-19 case record**
  - Locate phone number under "Telephones"



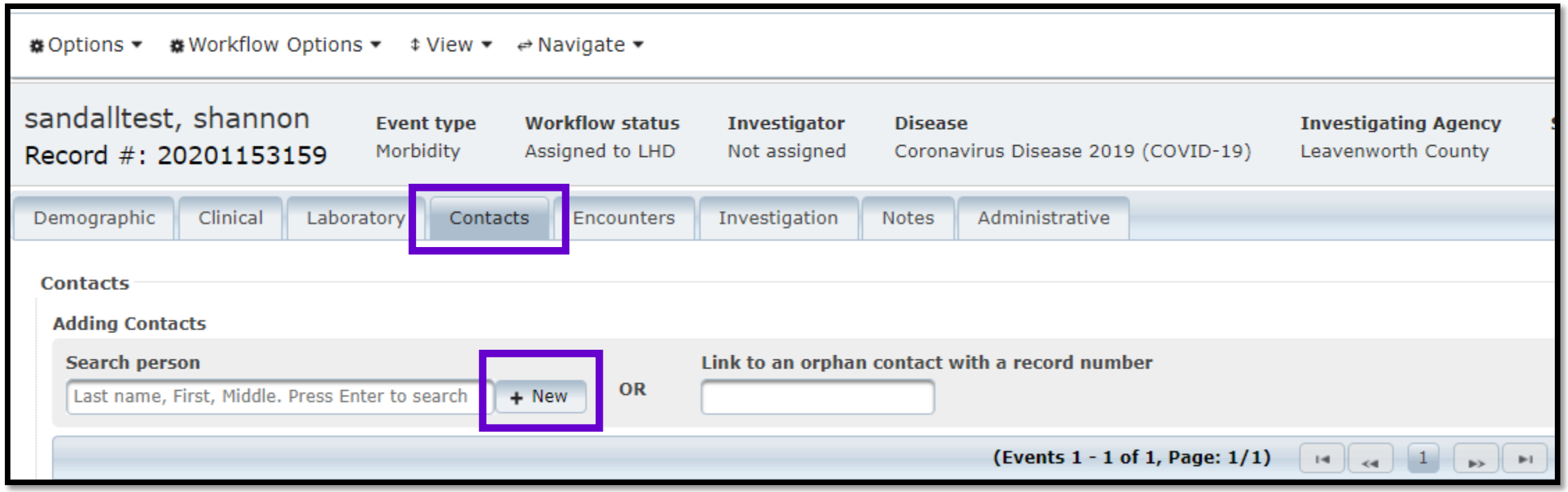
EpiTrax – Enter Close Contacts

- **"Contacts" tab within COVID-19 case record**
  - Search using name – Type "last, first name" and press enter
  - Select person if name and date of birth matches
  - Select "Save and Continue"



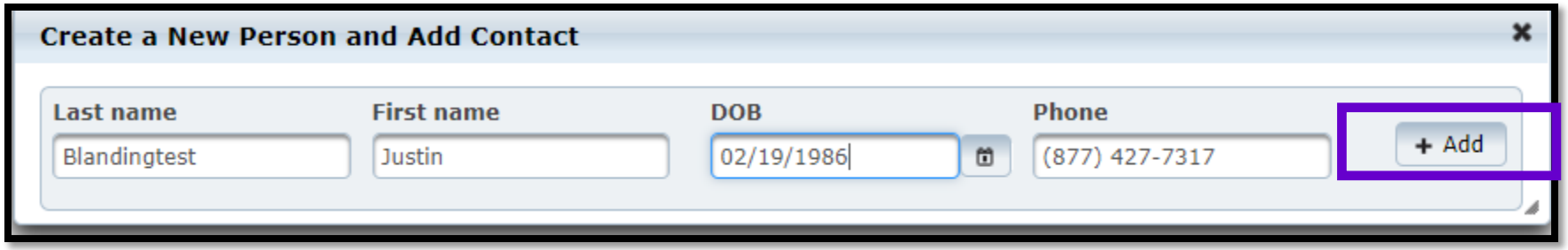
EpiTrax – Enter Close Contacts

- **"Contacts" tab within COVID-19 case record**
  - If not already in EpiTrax, create new contact by clicking "+ New"
    - If spelling of name doesn't match, create new contact
    - If spelling matches, but date of birth is not entered, create new contact



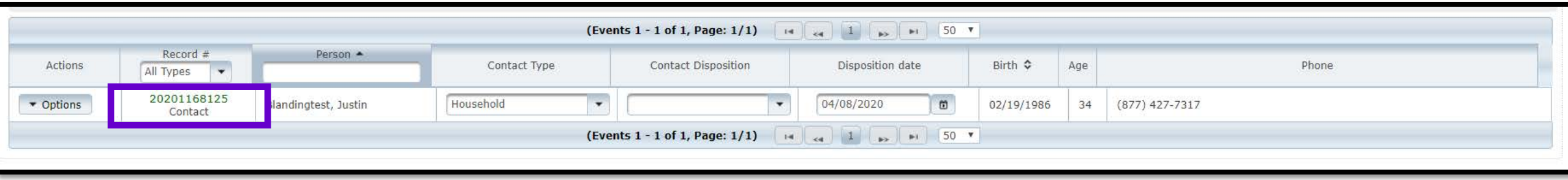
EpiTrax – Enter Close Contacts

- **Add new contact**
  - Enter name, date of birth, and phone number then click “+ Add”



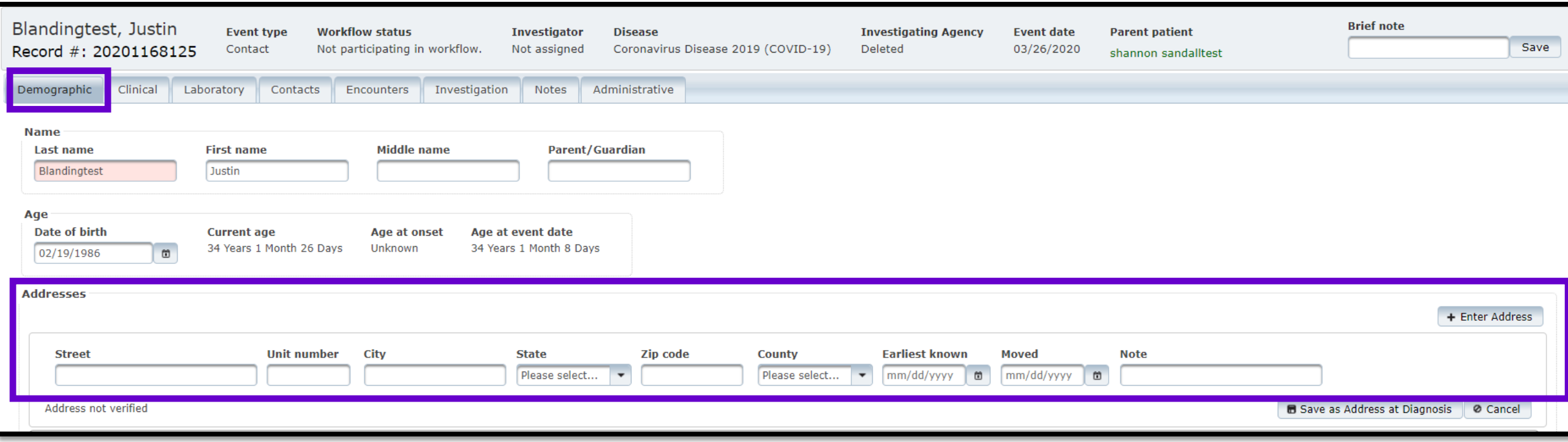
EpiTrax – Enter Close Contacts

- **Add new contact**
  - Add address of contact by clicking on the contact record number



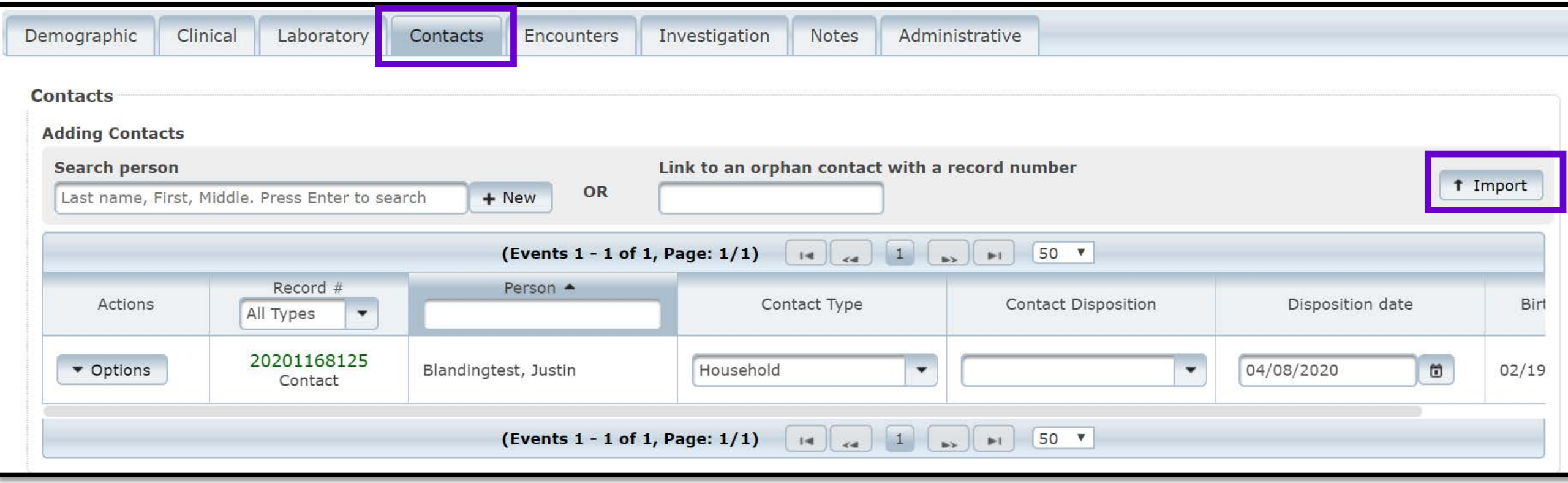
EpiTrax – Enter Close Contacts

- **"Demographic" tab within COVID-19 contact record**
  - Enter address
  - Address will verify after you enter "Street", "City", and "State" (automatically fill in "Zip code" and "County



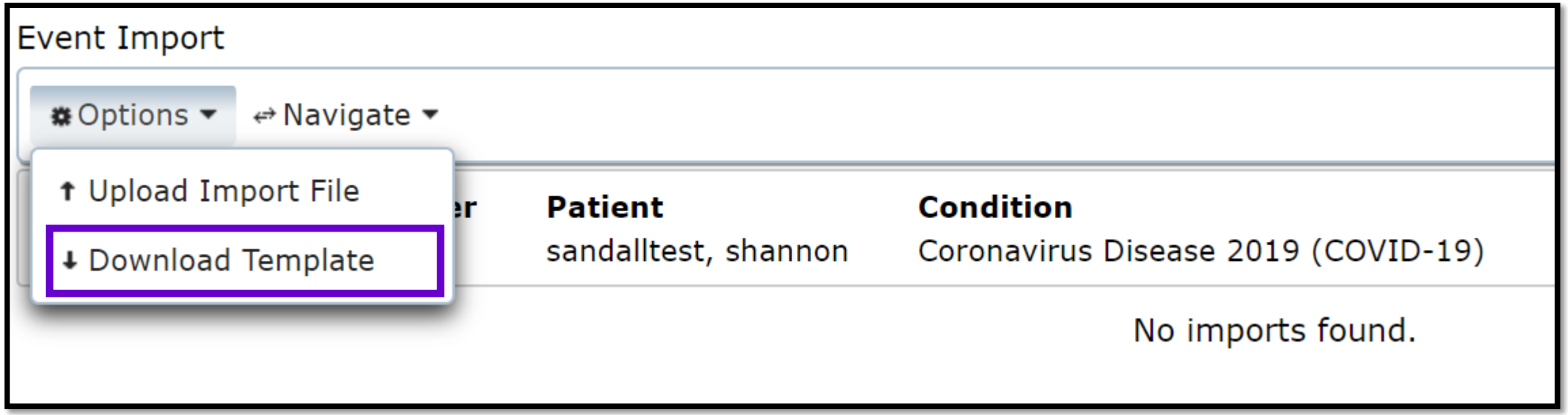
EpiTrax – Enter Multiple Contacts

- **"Contacts" tab within COVID-19 case record**
  - Import function – saves time from manually entering each contact



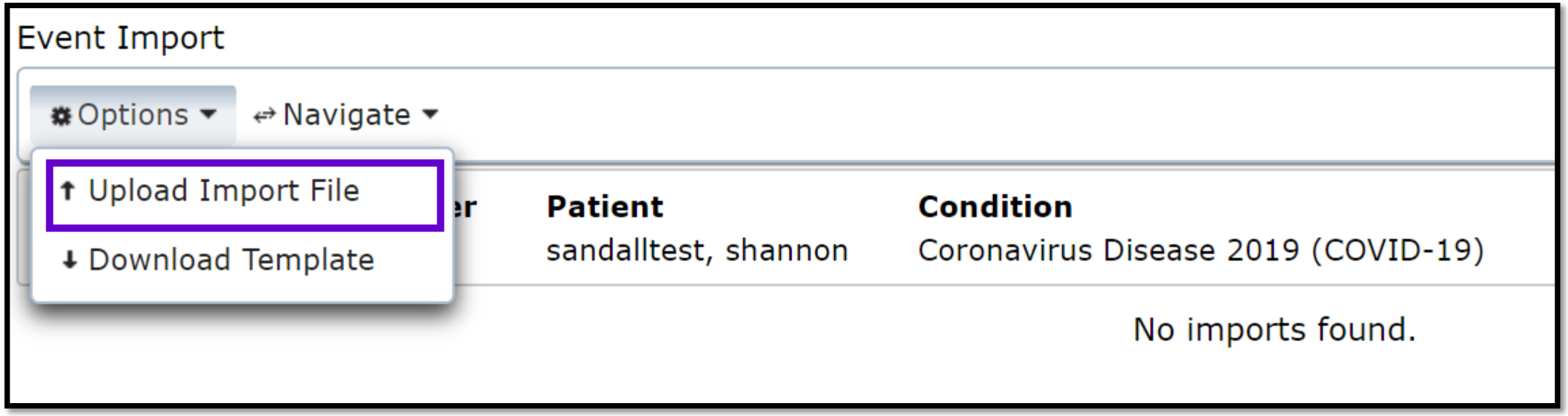
EpiTrax – Enter Multiple Contacts

- **“Contacts” tab within COVID-19 case record**
  - Select “Download Template”
  - Excel spreadsheet will download to your computer



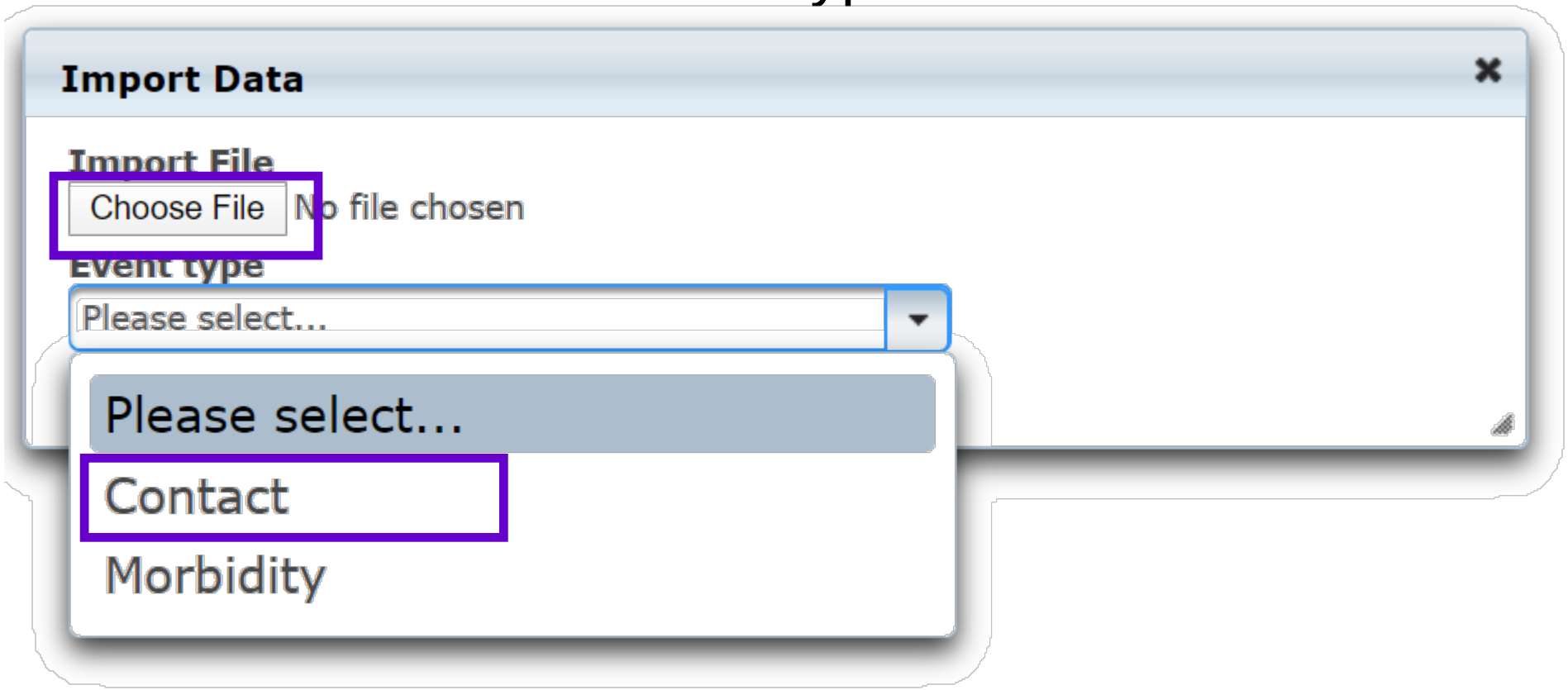
EpiTrax – Enter Multiple Contacts

- **“Contacts” tab within COVID-19 case record**
  - Fill out excel spreadsheet and save to computer
  - Select “Upload Import File”



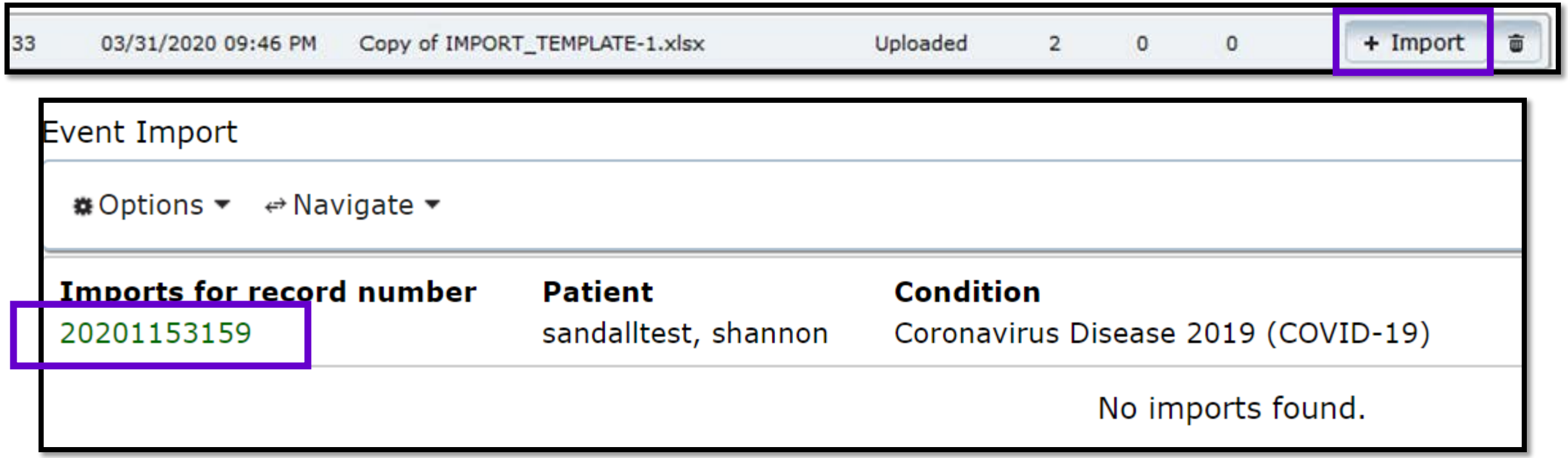
EpiTrax – Enter Multiple Contacts

- **“Contacts” tab within COVID-19 case record**
  - Select “Choose File” to find saved excel document
  - Select “Contact” for “Event Type” and then “Submit”



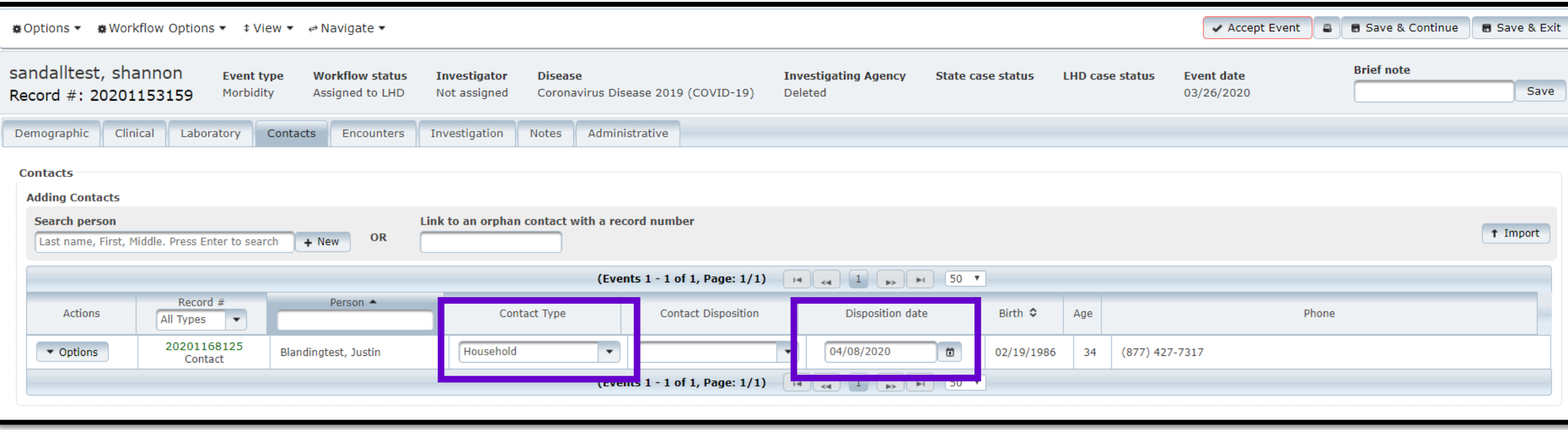
EpiTrax – Enter Multiple Contacts

- **"Contacts" tab within COVID-19 case record**
  - Select "+ Import"
  - Select record number to return to COVID-19 case



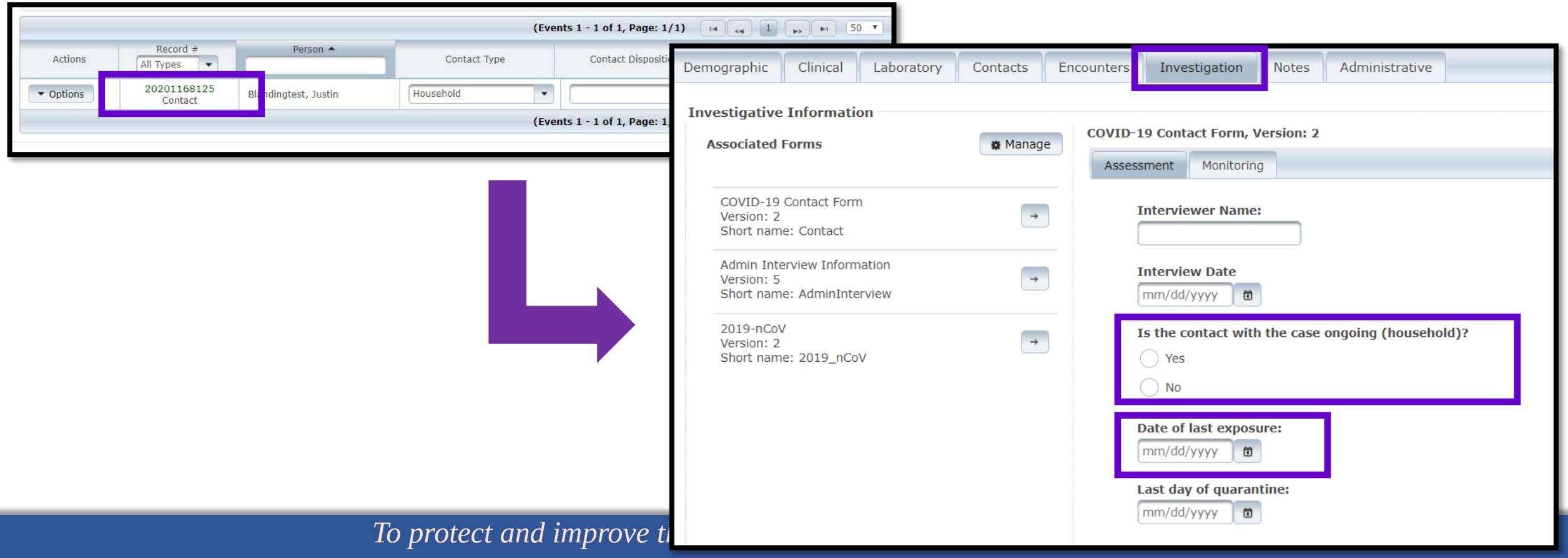
EpiTrax – Adding Contact Type and Quarantine Date

- **"Contacts" tab within the COVID-19 case record**
  - Select "Contact Type" from drop down list
    - If works in healthcare, law enforcement, or public health – notify local health department to conduct
  - Enter "Disposition date" = start date of quarantine



EpiTrax – Adding Date of Last Exposure

- **"Investigation" tab within the COVID-19 contact record**
  - Click on contact record number to get to contact "Investigation" tab
  - Enter if contact is still ongoing
  - Enter "Date of last exposure"



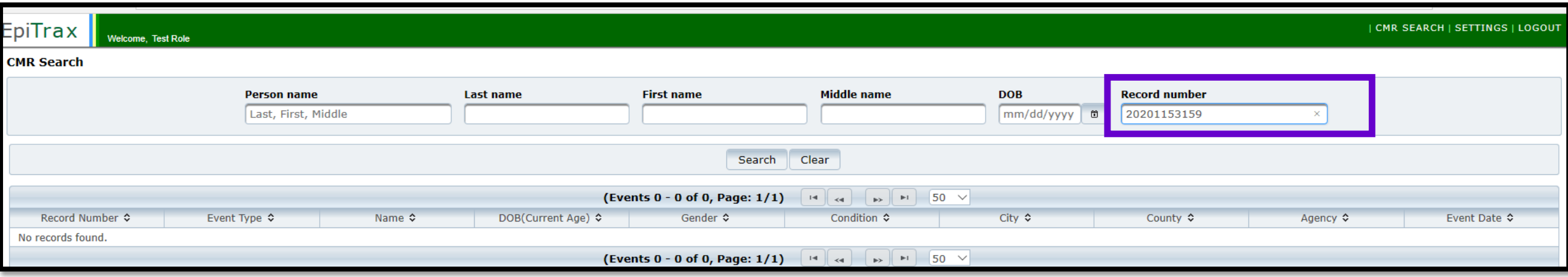
Contact Tracer Responsibilities

EpiTrax – Locate COVID-19 Case

- **Dashboard on homepage**
  - Click “CMR search”

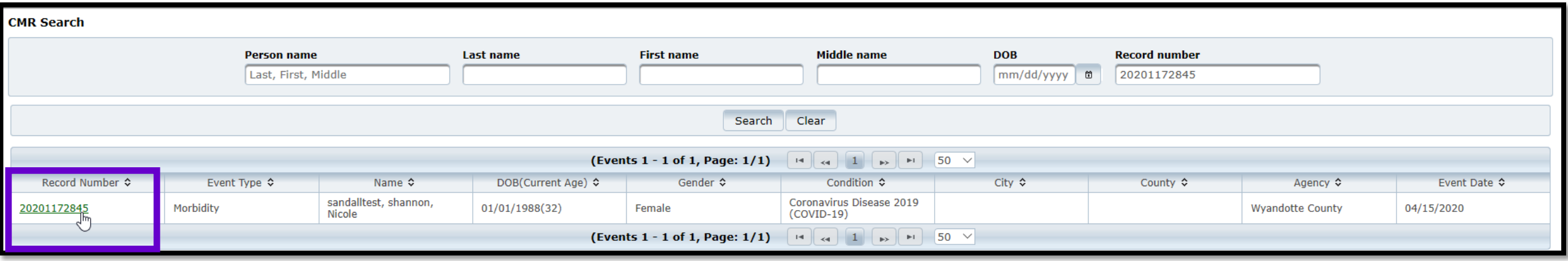
EpiTrax – Locate COVID-19 Case

- **CMR search**
  - Obtain EpiTrax record number from local health department
  - Input EpiTrax record number in “Record Number”
  - Click “Search”



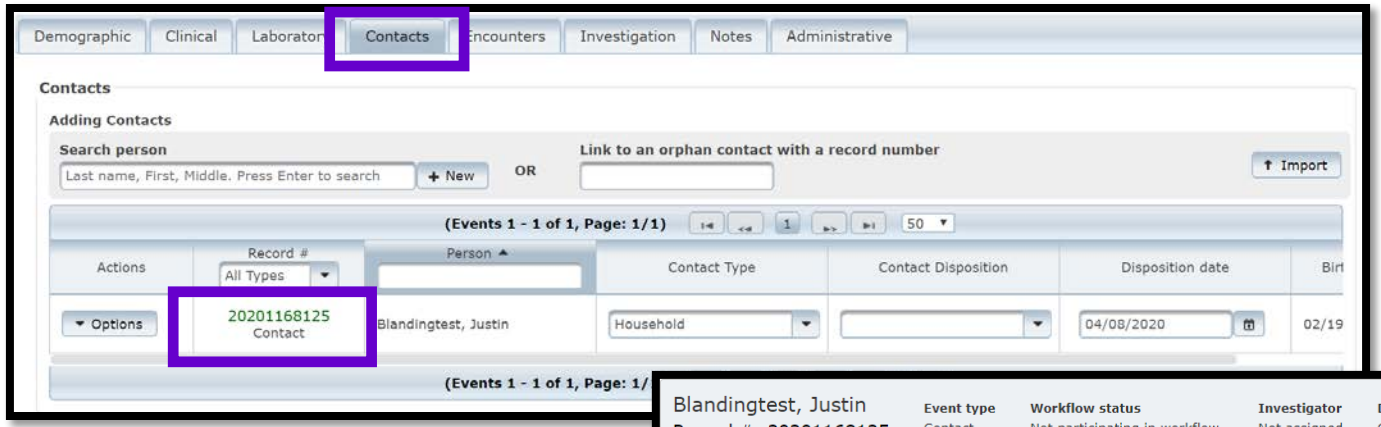
EpiTrax – Locate COVID-19 Case

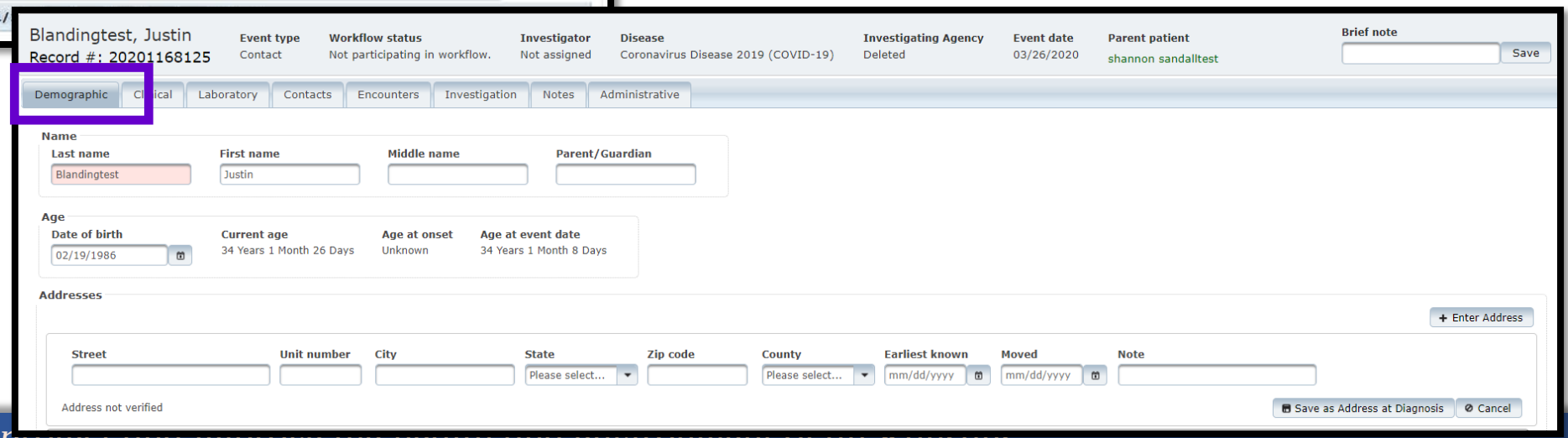
- **CMR search**
  - Click on the case record number



EpiTrax – Locate Contacts

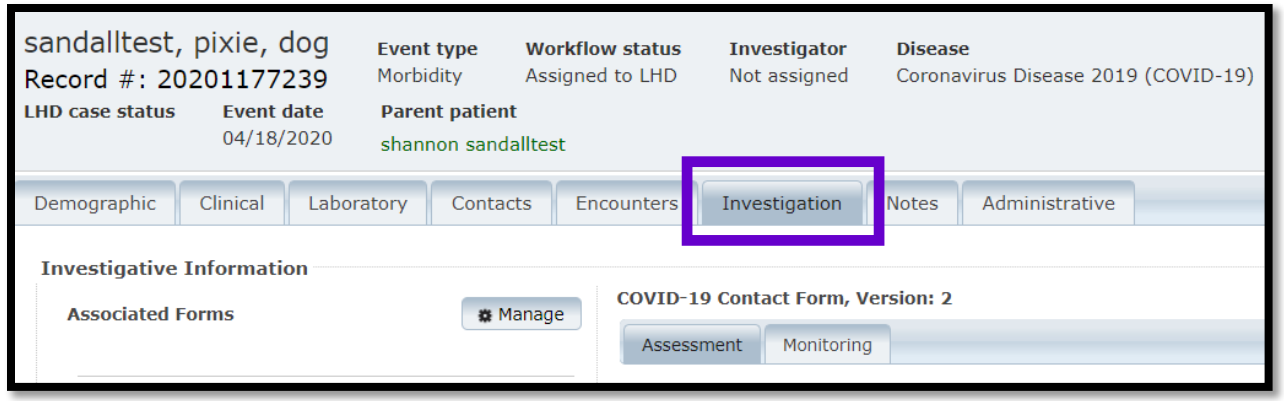
- **"Contacts" tab within COVID-19 case record**
  - Select the contact's record number to obtain phone number within "Demographic" tab of contact record

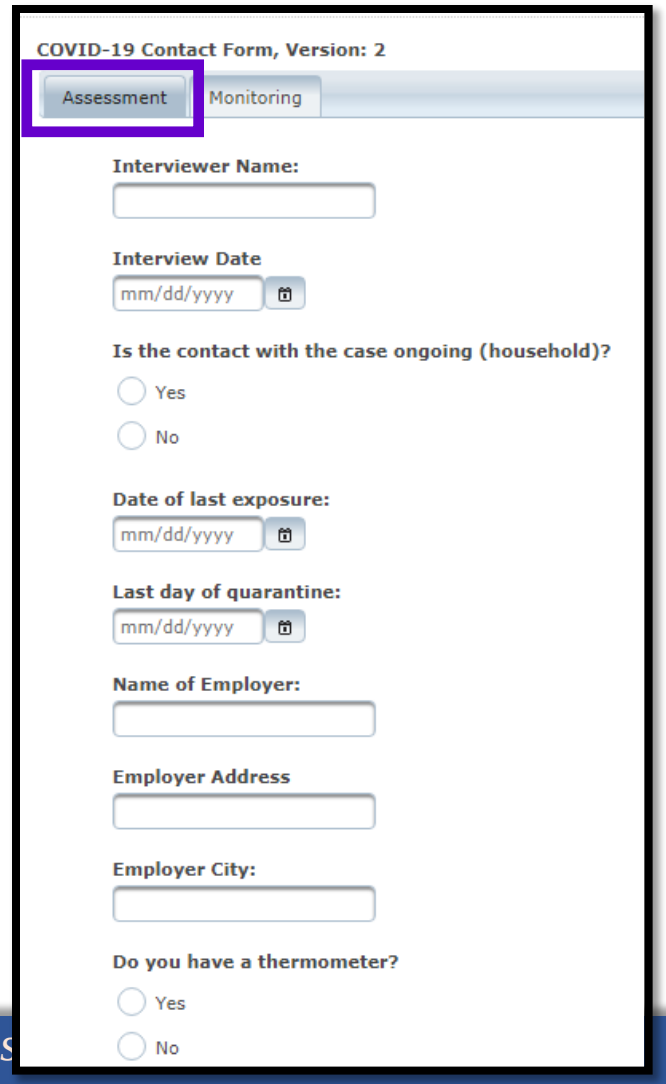




EpiTrax – Complete Initial Interview

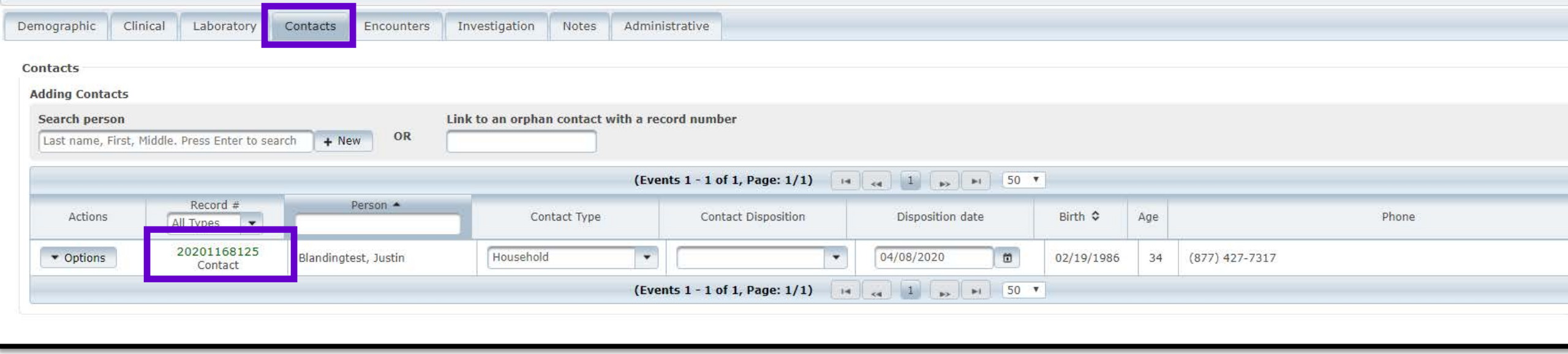
- **"Investigation" tab within COVID-19 contact record**
  - Complete everything in the "Assessment" tab





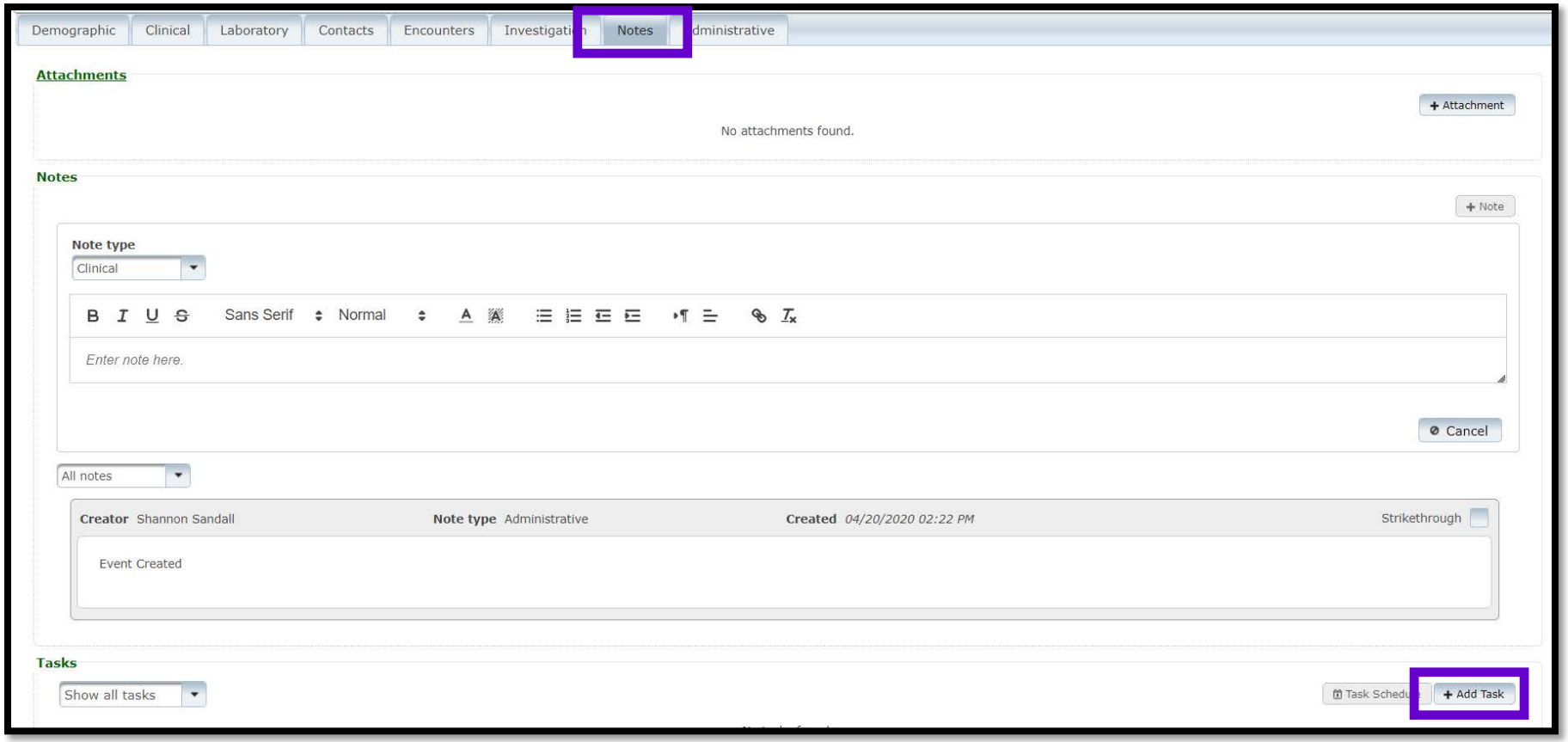
EpiTrax – Create Task for Daily Follow-Up

- **"Contacts" tab within COVID-19 case record**
  - Select the contact's record number



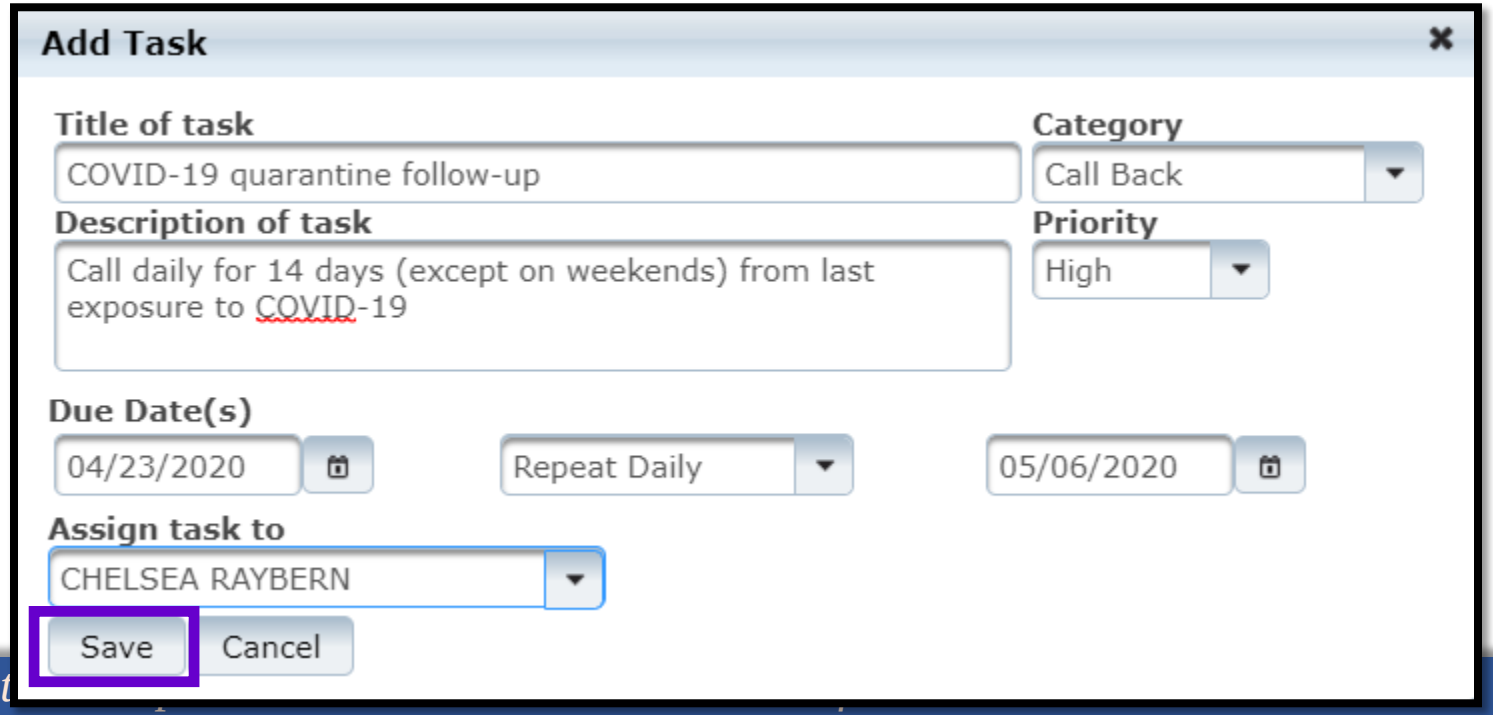
EpiTrax – Create Task for Daily Follow-Up

- **“Notes” tab within COVID-19 contact record**
  - Select “+ Add Task”



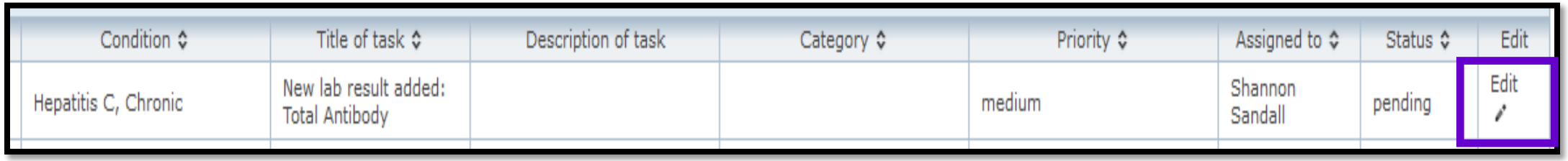
EpiTrax – Create Task for Daily Follow-Up

- **"Notes" tab within COVID-19 contact record**
  - Enter all requested information in the task box
  - Due date = first date of 14 day quarantine
  - Repeat date = last date of 14 day quarantine
  - Assign task to contact tracer follow up with contact
  - Select "Save"

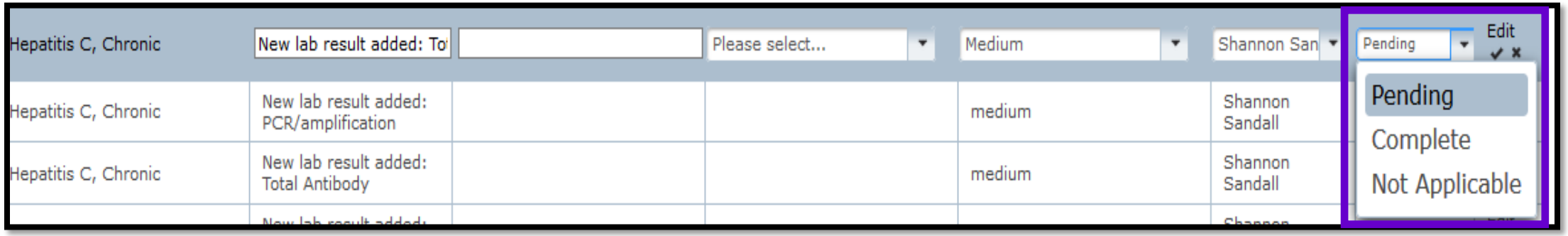


EpiTrax – Completing Tasks

- **"Dashboard" on EpiTrax homepage**
  - Select the pencil under "Edit"
  - Select the arrow to the right of "Pending"
  - Select "Complete"
  - Select the check mark under "Edit"

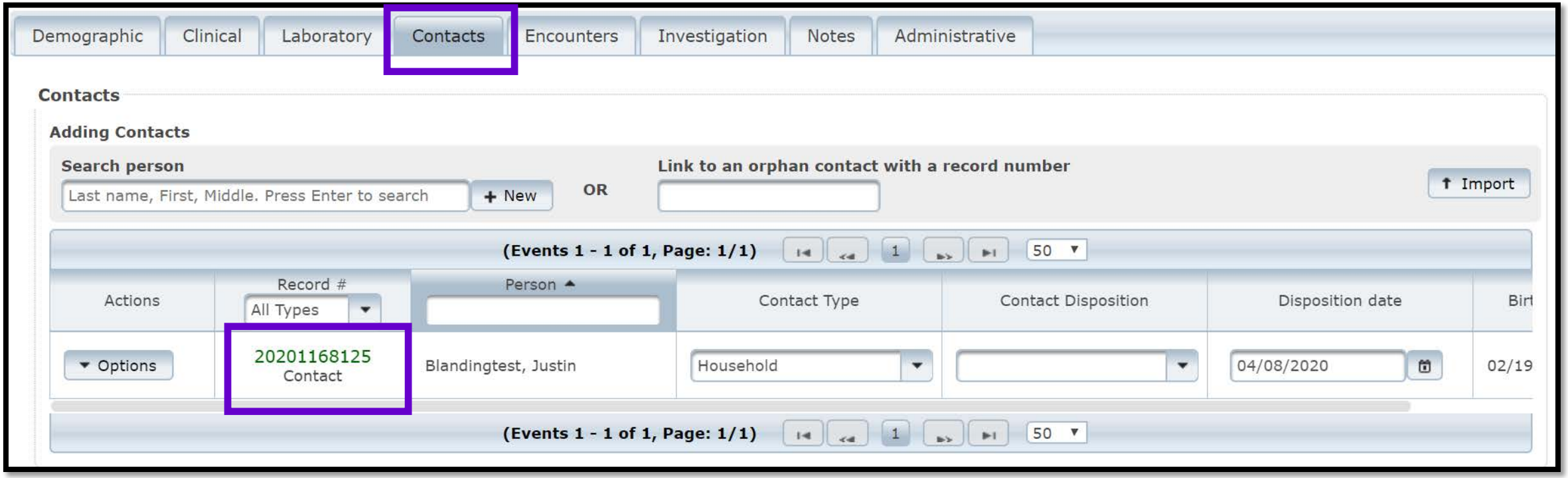


Condition	Title of task	Description of task	Category	Priority	Assigned to	Status	Edit
Hepatitis C, Chronic	New lab result added: Total Antibody			medium	Shannon Sandall	pending	Edit



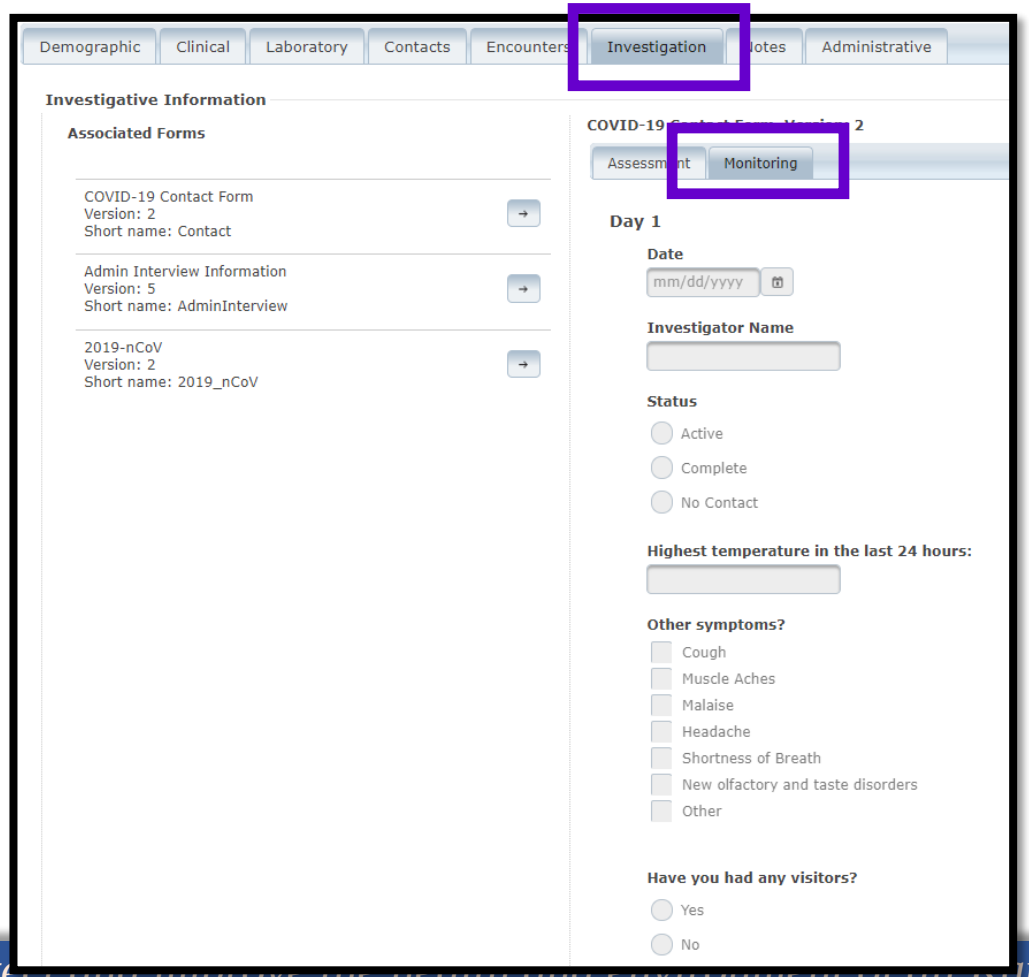
EpiTrax – Monitoring the Contact

- **"Contacts" tab within COVID-19 case record**
  - Select the contact's record number to interview/document contact's quarantine follow-up



EpiTrax – Monitoring the Contact

- **“Investigation” tab within COVID-19 contact record**
  - Complete daily monitoring information



EpiTrax – Monitoring the Contact

- **“Investigation” tab within COVID-19 contact record**
  - Monitoring “Status”
    - Active = made contact with person
    - Complete = person has completed their quarantine
    - No Contact = you were unable to reach the person

EpiTrax – Monitoring the Contact

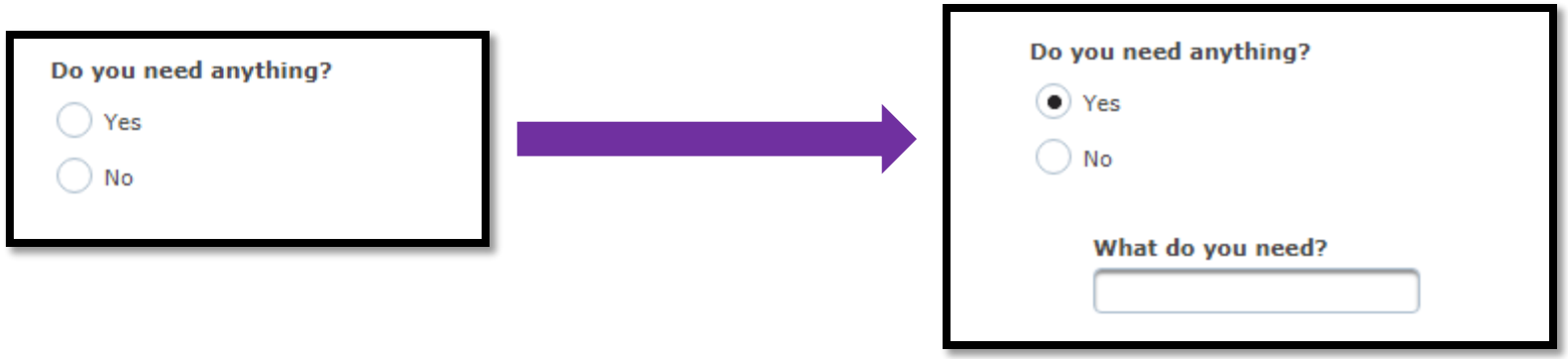
- **“Investigation” tab within COVID-19 contact record**
  - Monitoring symptoms

EpiTrax – Monitoring the Contact

- **"Investigation" tab within COVID-19 contact record**
  - Monitoring how well they are staying quarantined

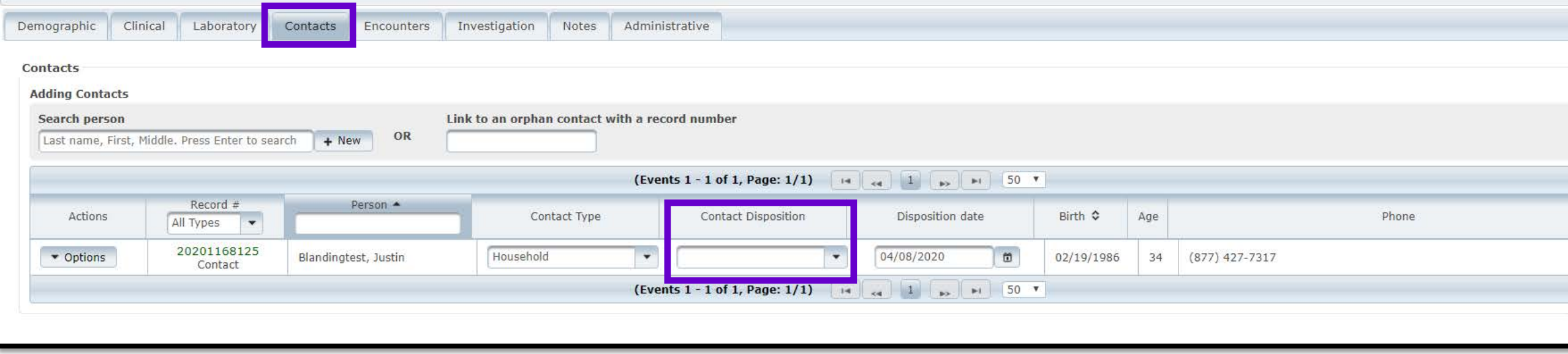
EpiTrax – Monitoring the Contact

- **“Investigation” tab within COVID-19 contact record**
  - Monitoring needs



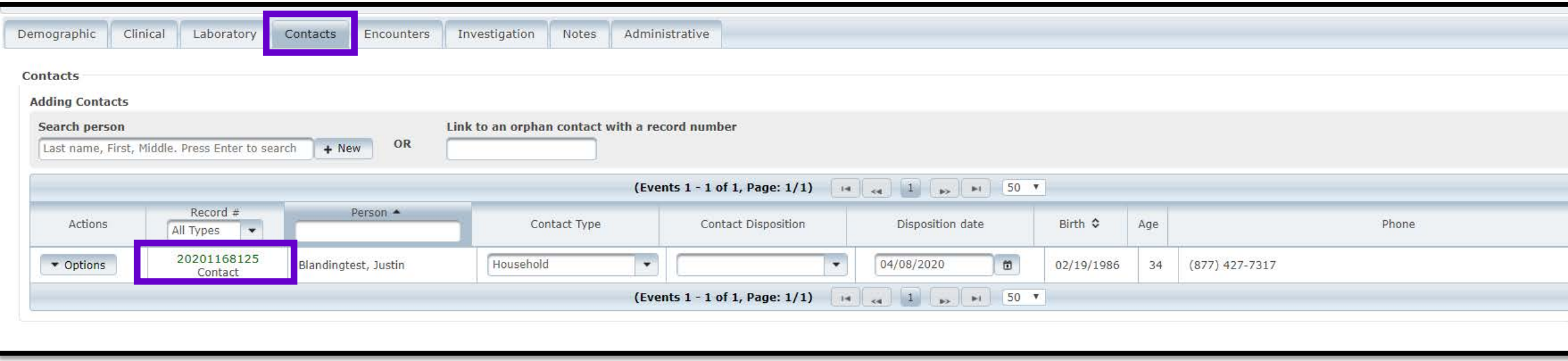
EpiTrax – Enter Disposition of Contact During/After Quarantine

- **"Contacts" tab within COVID-19 case record**
  - Select disposition once quarantine is completed or contact becomes symptomatic
  - If contact becomes symptomatic, select "testing/treatment recommended"



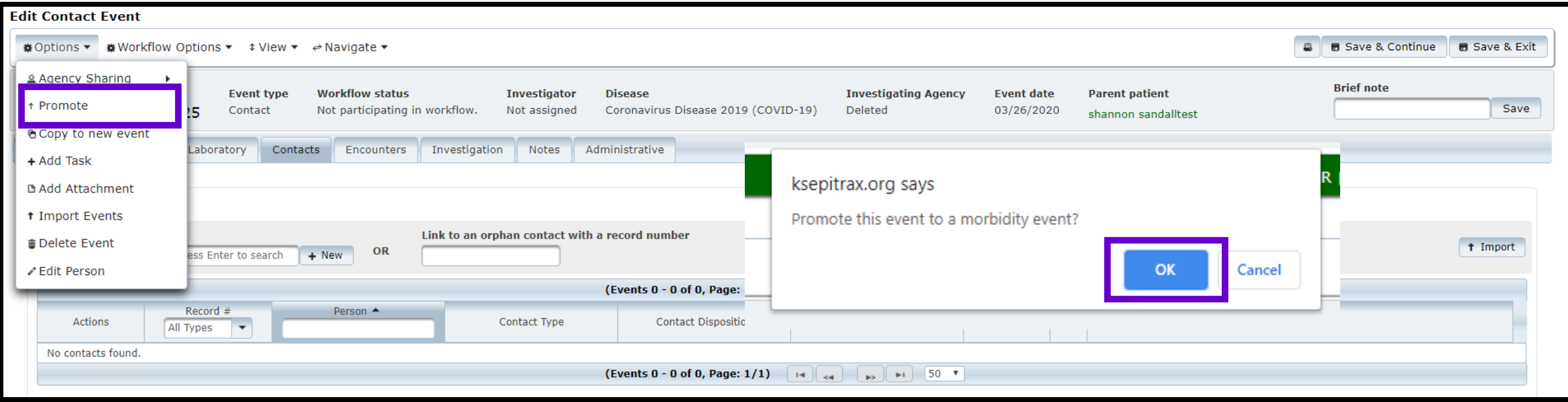
EpiTrax – Promote Symptomatic Contact to Case

- **"Contacts" tab within COVID-19 case record**
  - Click on the contact record number



EpiTrax – Promote Symptomatic Contact to Case

- **"Options" drop down list within contact record number**
  - Select "Promote" to create a morbidity (case) event
  - Select "OK" in pop up box
  - Notify local health department to begin case investigation



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 Epitrax case**
  - The record is locked while a person is entering information. “Save & Exit” unlocks the record for others.

COVID-19 Case Investigation Resources

- **Interview scripts will be provided for both contact investigators and tracers**

- **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

- **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