

# COVID-19

## Training Exercise

### Surveillance

(Passive and Active Contact Tracing)



# What is Contact Tracing?

Contact tracing is used to prevent the spread of infection, and to provide a rapid response to those who might be newly infected. It is a fundamental part of outbreak control, used by public health professionals around the world.

For confirmed and probable cases of COVID-19, work is carried out to identify anyone who has had close contact with them during the time they are considered to have been infectious.

# What is Contact Tracing?

## Active Contact Tracing:

Individual is provided with health advice, contacted daily and asked about relevant symptoms for 14 days after the last exposure to a confirmed case of COVID-19

## Passive Contact Tracing:

Individual is provided with health advice, advised to self-monitor for symptoms of COVID-19 and contact their local Public Health Department if they develop relevant symptoms in the 14 days after the last exposure to a confirmed case of COVID-19

# Surveillance (Passive and Active Contact Tracing)

## Case Scenario

A 36-year-old female and her 13-year-old daughter present to “Community Hospital” in [\*\*home country\*\*]. She reports history of fever (39.8), runny nose, cough and shortness of breath over the past three days. She also states that she believes she and her family were exposed to a “cold virus” during their travel back to [\*\*home country\*\*].

Upon arriving at the hospital, she informs the nurse that she, her daughter and husband have just returned from a trip to visit family in [\*\*international location\*\*]. She reports her husband has been well.

# Surveillance (Passive and Active Contact Tracing)

## Case Scenario

Upon further investigation, it is learned that the 36-year-old female patient's symptoms began with slight fever, cough and sore throat. The 13-year-old female patient symptoms began with high fever, runny nose and cough.

The family had recently been visiting relatives in [\*\*international location\*\*]. They arrived back in [\*\*home country\*\*] on February 26, 2020 after a flight to [\*\*home country\*\*]. Both patients visited numerous locations for three days while feeling sick before presenting at the hospital. Their symptoms started just before departing [\*\*international location\*\*] and getting on their flight home.

# Surveillance (Passive and Active Contact Tracing)

## Case Scenario

After consulting with public health department officials, both patients are tested for COVID-19.

The 13-year-old has mild symptoms and upon consultation with public health department officials, advised to self-isolate at home pending test results. The 36-year-old patient has signs of lower respiratory tract infection and is admitted to the hospital.

# Surveillance (Passive and Active Contact Tracing)

## Case Scenario

### Key Dates:

February 25 – Onset of symptoms

February 26 – Departed Italy

February 29 – Arrive in [\*\*home country\*\*]

March 2 – Patients present at hospital

March 5 – Both patients test positive for COVID-19

# Surveillance (Passive and Active Contact Tracing)

## Identify/ Isolate/ Inform

What notification or information sharing protocols will be enacted at your facility to address internal and external communication of a patient with potential COVID-19 and their contacts?

Identify three actions that the facility would be asking of response partners to help you within the first 24 hours of this response, including Emergency Management, Public Health, Law Enforcement, Ministry of Health, ?



# What is close contact?

- An individual living in the same household, sharing kitchen or bathroom facilities, or sexual partners
- An individual who had direct or physical contact with an infected person (remained within two meters of the patient for longer than 15 minutes)
- Healthcare workers who have not worn appropriate PPE during direct contact with infected person, their body fluids or laboratory specimens, or were present in same room when aerosol-generating procedure performed
- Passengers on an aircraft sitting within two seats (in any direction) of the COVID-19 case, travel companions or persons providing care, and crew members serving in the section of the aircraft where the index case was seated.

# What is close contact?

- Contact needs to have occurred during the infectious period
- Given the current knowledge about COVID-19 transmission, the infectious period is defined as from the day of symptom onset in the case until the case is classified as no longer infectious by the treating team (usually 24 hours after symptom resolution)

***People who have passed the patient in the street or in a shop are at very low risk and are not traced***

# What is casual contact?

- Healthcare workers who have taken recommended infection control precautions, including the use of appropriate PPE, during the following exposures to the confirmed case: 1) Direct contact with the case (as defined above) or their body fluids 2) Present in the same room when an aerosol generating procedure is undertaken on the case.
- Any individual who has shared a closed space with a confirmed case for less than two hours
- Passengers on an aircraft sitting beyond two seats (in any direction) of a confirmed case

# What advice is given to close contacts?

- Mainly information on what to do if they become unwell or develop certain symptoms.
- Anyone believed to be at higher risk of infection could be asked to self-isolate – remaining within their home and avoiding public places. These people will be in daily contact with health experts until they are given the all-clear.
- Should a person develop symptoms, they are tested and provided further instructions for care if they prove to be positive for the virus.

# Surveillance (Passive and Active Contact Tracing)

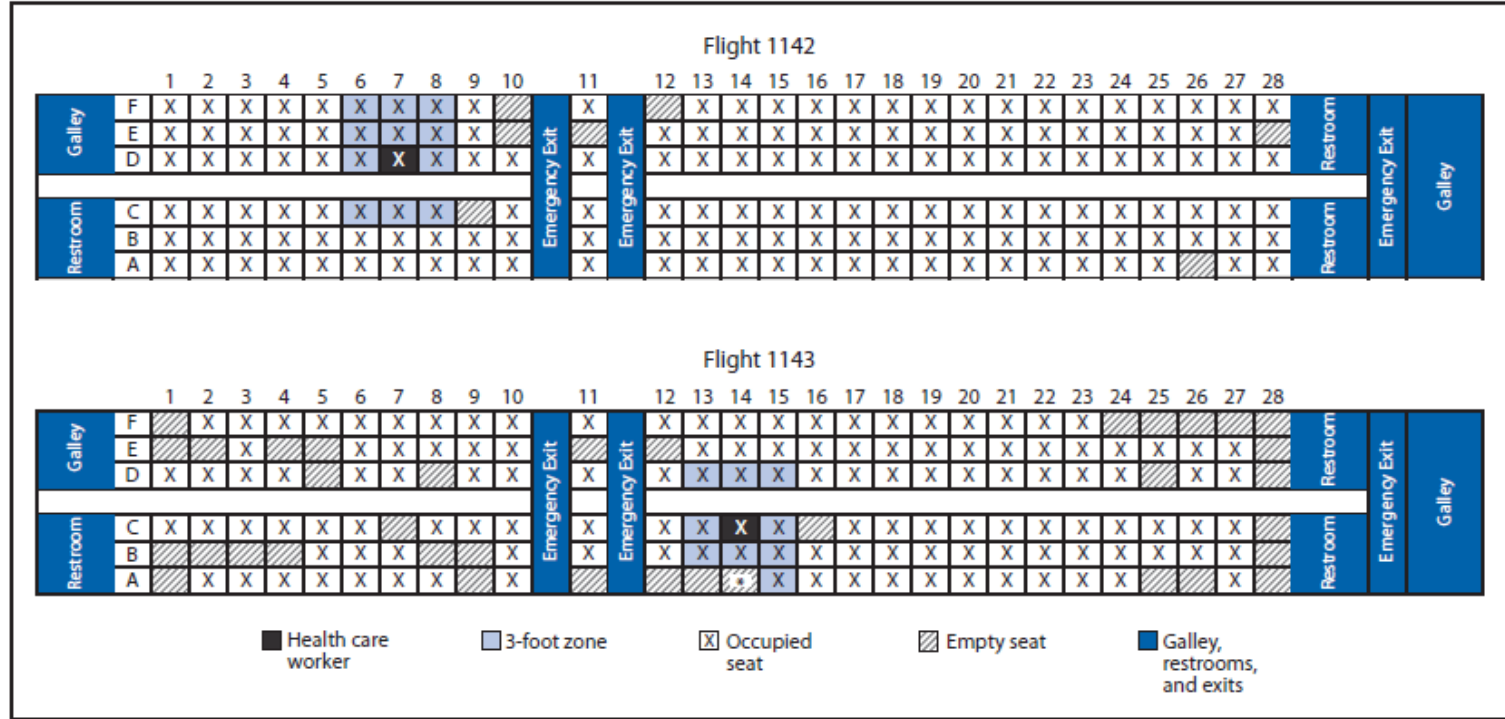
## Case Scenario

### Mother's Contacts:

- Airplane passengers and flight crew on flight home.
- Shopped for groceries, had conversation with clerk.
- Lives with husband in apartment.
- Visited in-laws (age 70 and 68) who live in next-door apartment.
- Went to work at bank (bank teller), had meetings and shook hands with several colleagues and clients.
- Patients in waiting room at hospital.
- Hospital staff (nurses, doctors, clerks)

# Surveillance (Passive and Active Contact Tracing)

## Case Scenario



# Surveillance (Passive and Active Contact Tracing)

## Case Scenario

- How would you notify airplane passengers and flight crew of potential exposure to COVID-19?
- Which passengers / flight crew members are at the highest risk of contracting COVID-19?
- Can you rely on the passenger seating assignments from the airline? Why or why not?

# Surveillance (Passive and Active Contact Tracing)

## Case Scenario

### Mother's Contact List:

- Grocery store clerk: Had 5-minute conversation with clerk, standing about 1 meter away, no direct contact
- Husband: Lives in same apartment with husband, shares food, bathroom facilities, etc.
- Mother-in-law: Visited for 3 hours, no direct contact, in closed apartment
- Father-in-law: Visited for 30 minutes , no direct contact, in closed apartment



# Surveillance (Passive and Active Contact Tracing)

## Case Scenario

- Bank colleague 1: Had business meeting for 1 hour, shook hands
- Bank colleague 2: Had 5-minute conversation outside office, no direct contact
- Bank client 1: Spoke with client through glass window for 5-minutes
- Bank client 2: Met client in closed office and spoke for 30 minutes, no direct contact

# Surveillance (Passive and Active Contact Tracing)

## Case Scenario

- Patients in waiting room at hospital: 3 patients in waiting room at same time, sitting approximately 1 meter away, no direct contact.
- Hospital staff: Two nurses who provided care while wearing full PPE, one physician who was not wearing face mask during initial evaluation.

# Surveillance (Passive and Active Contact Tracing)

## Task

Read descriptions with information regarding each contact's history.

For each of the mother's contacts, determine which category the contact falls into and determine the plan for passive or active contact tracing.

Close Contacts (High-Risk)	Casual Contacts (Low-Risk)	Other (Very Low Risk)
Active contact tracing	Passive contact tracing	No tracing
Husband		

# Surveillance (Passive and Active Contact Tracing)

## Contact Tracing

- The community hospital notifies the local health department who initiates contact tracing.
- What steps should you take to monitor healthcare personnel (HCP) who might have been exposed (e.g., provided care to COVID-19 patients)?
- What steps should you take to monitor non-healthcare personnel such as family members or colleagues who might have been exposed?
- What steps would you take if any contacts develop symptoms? Is this different for HCPs versus non-HCPs?

# Surveillance (Passive and Active Contact Tracing)

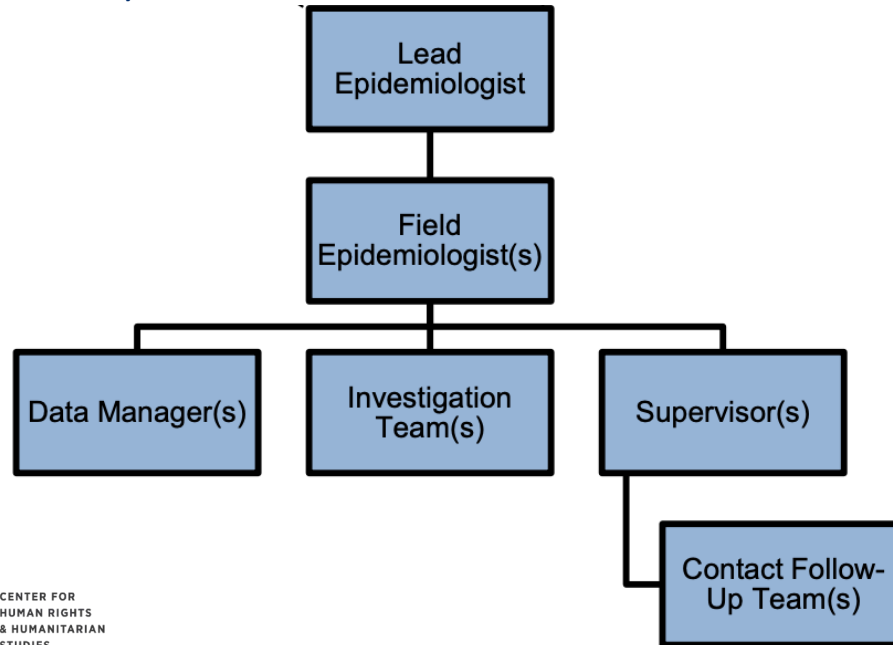
## Contact Tracing

- HCP who care for patients with COVID-19 should be monitored for a period of 14 days after the last known contact with a COVID-19 patient.
- For asymptomatic HCP who have had an unprotected exposure to a patient with COVID-19 exclude from work for 14 days to monitor for signs and symptoms of respiratory illness and fever.
- Contacts who develop any respiratory symptoms after an unprotected exposure to a patient with COVID-19 should self-isolate and be monitored for a period of 14 days after the last known contact with a COVID-19 patient.

# Surveillance (Passive and Active Contact Tracing)

## Contact Tracing

Assign members of your group to roles needed to carry out contact tracing activities (sample framework below):



# Surveillance (Passive and Active Contact Tracing)

## Task

- Break into pairs – one person will be the “contact tracer” and one the contact.
- Go through the telephone call that you would have with the contact who is on self-isolation at home for the following scenarios.
- Telephone call on Day 3 – asymptomatic.
- Telephone call on Day 7 – symptoms of sore throat and fevers.
- What are the messages you need to deliver on Day 3 vs. Day 7 to the contact?
- What are the key actions you need to perform as a contact tracer once you have identified a symptomatic contact?

# Surveillance (Passive and Active Contact Tracing)

## Contact Tracing

**Table 1. Estimated resources needed for contact tracing**

Activity	Human resources			Material
	Staff profile	Number of staff	Time (per staff)	
Interview case (*)	HCW/public health staff	One	Two hours	<ul style="list-style-type: none"><li>• Phone</li><li>• Questionnaire</li><li>• Translation services (if necessary)</li></ul>
Create contact list and retrieve personal information. This may require collaboration with other entities, including transport authorities, companies, and hospitals.	Administrative or other services	One	Six hours	
Enter interview in the system (e.g. electronic information system or excel file)	HCW/ public health staff	One	One hour	<ul style="list-style-type: none"><li>• Database</li></ul>
Classification of contacts as high or low-risk exposure; including prioritisation of whom to contact.	Two HCW/ public health staff One administrative or other services	Three	Two hours	
Initial interview by phone with contacts. Through this interview, staff will establish the contacts' level of exposure, ask about symptoms and other personal information. Staff will also provide information about infection control measures, symptom monitoring and other precautionary measures.	HCW/ public health staff	One	45 min.	<ul style="list-style-type: none"><li>• Phone</li><li>• Questionnaire</li></ul>
Enter information from interview into database	HCW/ public health staff	One	15 min.	<ul style="list-style-type: none"><li>• Database</li></ul>



# Surveillance (Passive and Active Contact Tracing)

## Contact Tracing

- Contact tracing should be done for all probable and confirmed cases.
- Complete Contact Tracing Form and provide a copy to your local designated authority.
- Advise contacts of signs and symptoms of illness and refer them to their healthcare providers if they experience any symptoms compatible with novel coronavirus infection within 14 days of their last contact with the confirmed or probable case.



# Surveillance (Passive and Active Contact Tracing)

CONTACT MONITORING LOG				
Name of contact		<input style="width: 100%;" type="text"/>		
Phone number		<input style="width: 100%;" type="text"/>	Contact ID*	<input style="width: 100%;" type="text"/>
Surveillance start date (last exposure to case):		<input style="width: 100%;" type="text"/>	Surveillance end date (14 days from last exposure to case)	
<b>Daily log below, please fill in for each day of monitoring:</b>				
Day of follow up	Date	Temp $\geq 38^{\circ}$ C	Symptoms (Yes/ No)	Initials of PH team member
Day 1	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 2	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 3	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 4	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 5	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 6	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 7	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 8	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 9	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 10	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 11	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 12	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 13	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
Day 14	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
If contact developed symptoms, please provide details:				
<input style="width: 100%; height: 100%;" type="text"/>				

# Surveillance (Passive and Active Contact Tracing)

## Contact Tracing

- Advise ill close contacts to call ahead prior to visiting their healthcare provider and inform their healthcare provider about recent contact with a confirmed or probable case.
- Close contacts with respiratory or other compatible symptoms should be tested
- Close contacts should be actively monitored for symptoms of novel coronavirus infection for a minimum of 14 days after last contact with the confirmed/probable case (i.e., follow-up should be performed at regular intervals).
- Collect serum specimens or other laboratory specimens on asymptomatic close contacts, when requested (See Laboratory Procedures section)
- Provide close contacts with a disease fact sheet, if available.

# Surveillance (Passive and Active Contact Tracing)

## Contact Tracing

- What are your protocols if a contact you have reached by phone reports signs of serious illness?
- What about for moderate illness?