

Basics of Contact Tracing for COVID-19

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Learning Objectives

- ▶ Describe what contact tracing is and how it stops transmission of SARS-CoV-2
- ▶ Define a case of COVID-19 and a contact
- Explain the meaning and purpose of isolation and quarantine
- ► Calculate how long a case should isolate and how long a contact should quarantine
- Describe the connection between the infectious period and isolation and quarantine
- ► Identify high-risk settings for transmission that require extra action

Contact Tracing for COVID-19 Prevention



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A Case of COVID-19 Requires Action

- ▶ Diagnosing a case of COVID-19 is important because we have to act
- Support the person who is infected
 - ► Ensure they have access to medical care and social services
 - Offer treatment
 - ► Limit their contact with other people
- Identify people they may have infected
 - ▶ Notify them about their exposure and offer social services
 - Offer treatment
 - ► Limit their contact with other people

Public Health Prevention for COVID-19

If we can limit contact between people who are infected and others, we can limit opportunities for the virus to be transmitted

Timeline of Infection: Infectious Period

CALENDAR DAYS

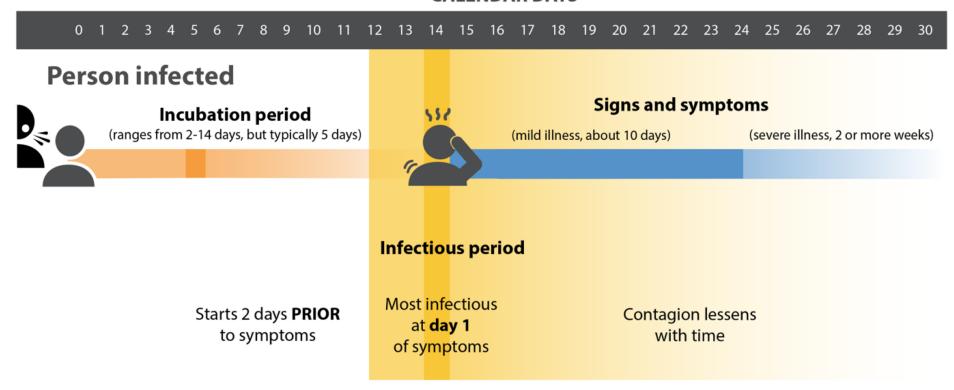


Image source: Center for Teaching and Learning, Johns Hopkins Bloomberg School of Public Health.

Timeline of Infection: Infected Contact

CALENDAR DAYS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Person infected Incubation period (ranges from 2-14 days, but typically 5 days) Infected Contact (5 day incubation) (10 days signs and symptoms)

Image source: Center for Teaching and Learning, Johns Hopkins Bloomberg School of Public Health.

Timeline of Infection: Window of Opportunity

CALENDAR DAYS O 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Person infected Incubation period (ranges from 2-14 days, but typically 5 days) Infected Contact (5 day incubation) Window of Opportunity (before they become infectious)

Image source: Center for Teaching and Learning, Johns Hopkins Bloomberg School of Public Health.

Isolation and
Quarantine Can
Have a Big
Impact on
Reducing
Transmission

 Stopping one transmission chain can prevent many future cases R0 = 2

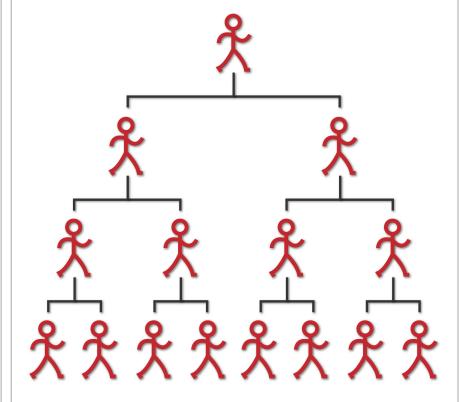


Image source: Johns Hopkins University.

Quarantine Can Have a Big Impact on Reducing Transmission

 Stopping one transmission chain can prevent many future cases What happens if we stop each case from infecting just one person?

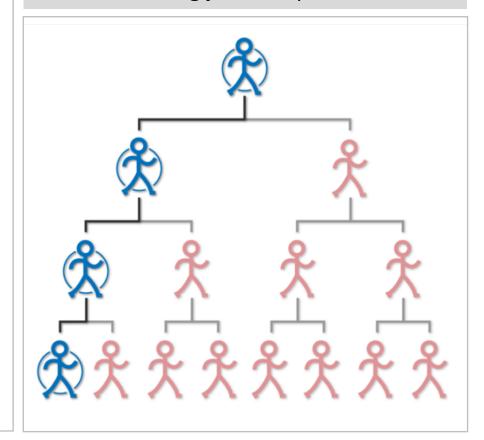


Image source: Johns Hopkins University.