JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

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

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

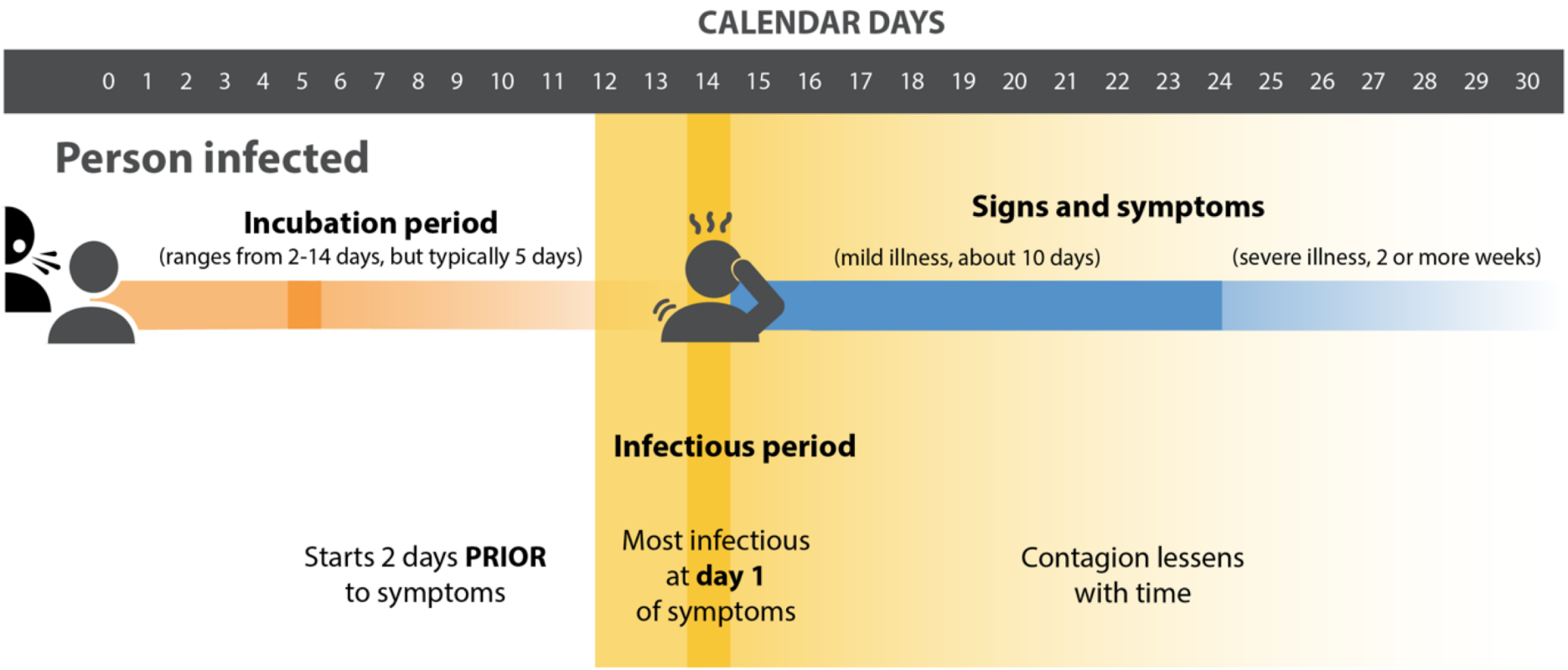


Image source: Center for Teaching and Learning, Johns Hopkins Bloomberg School of Public Health.

Timeline of Infection: Infected Contact

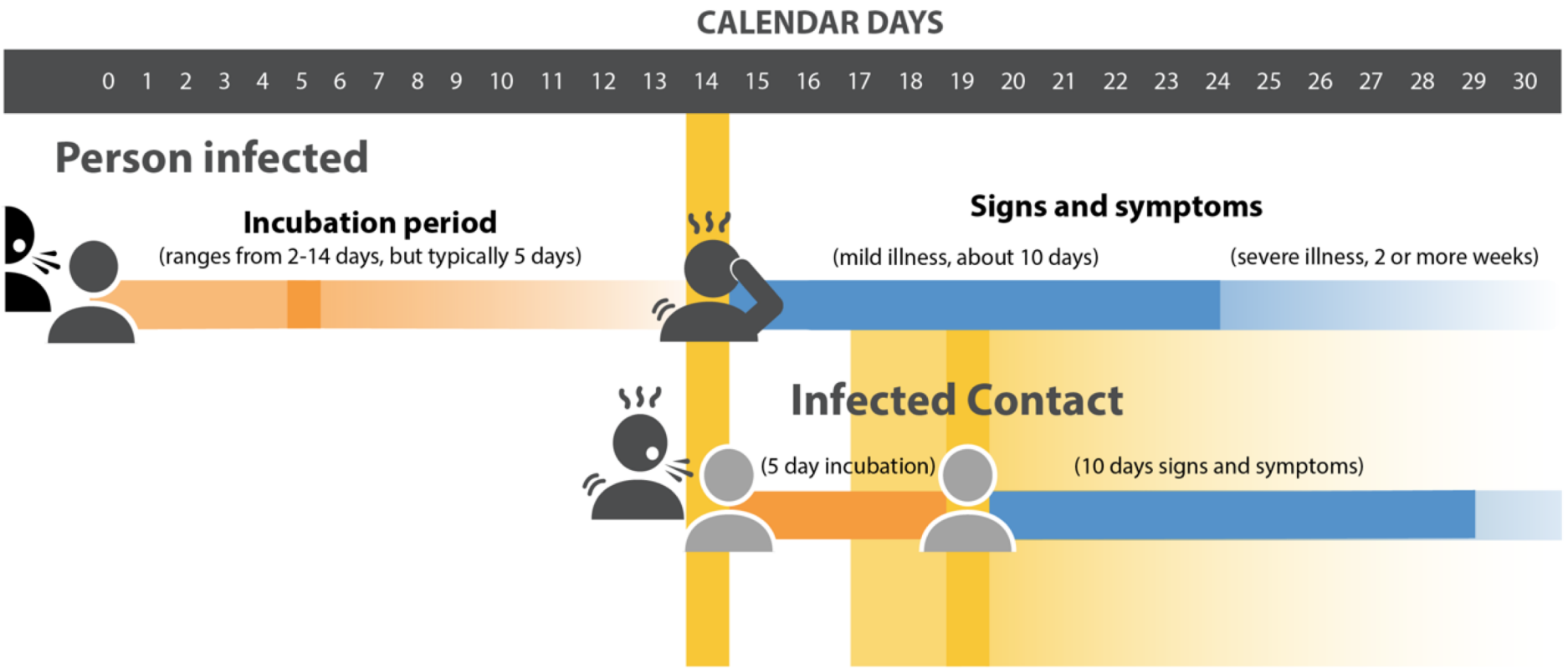
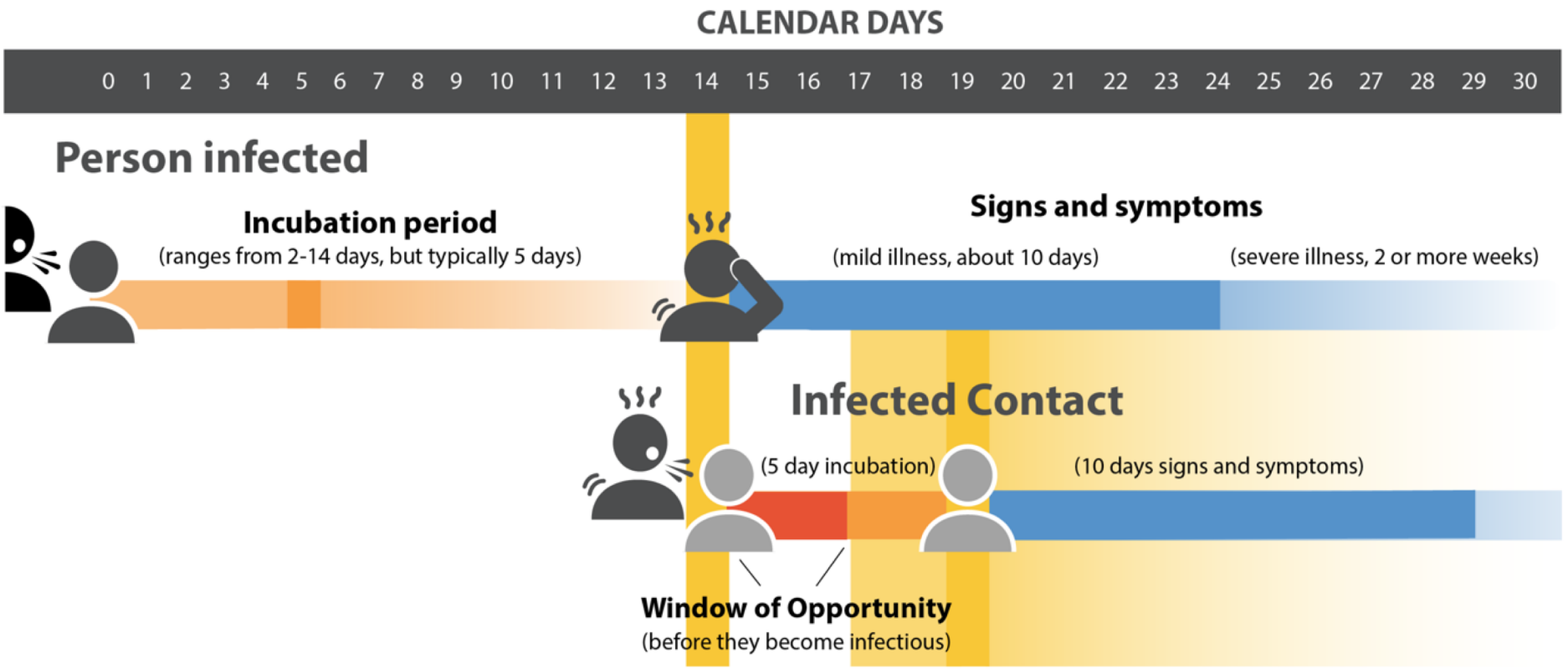


Image source: Center for Teaching and Learning, Johns Hopkins Bloomberg School of Public Health.

Timeline of Infection: Window of Opportunity



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Isolation and Quarantine Can Have a Big Impact on Reducing Transmission

- Stopping one transmission chain can prevent many future cases

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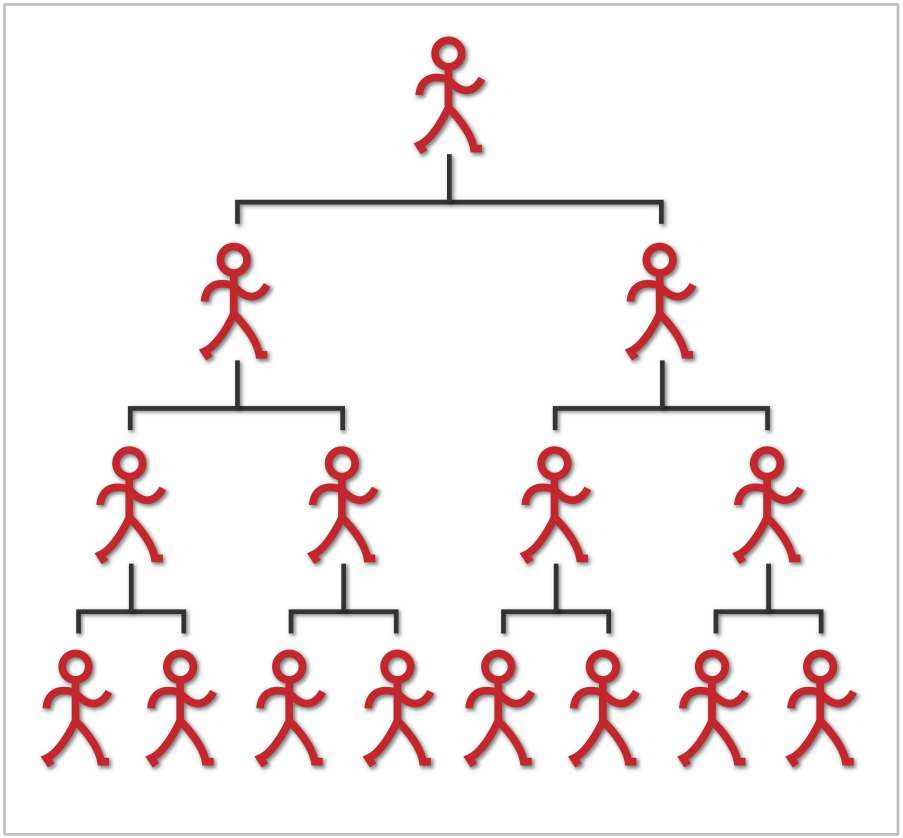

Image source: Johns Hopkins University.

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?

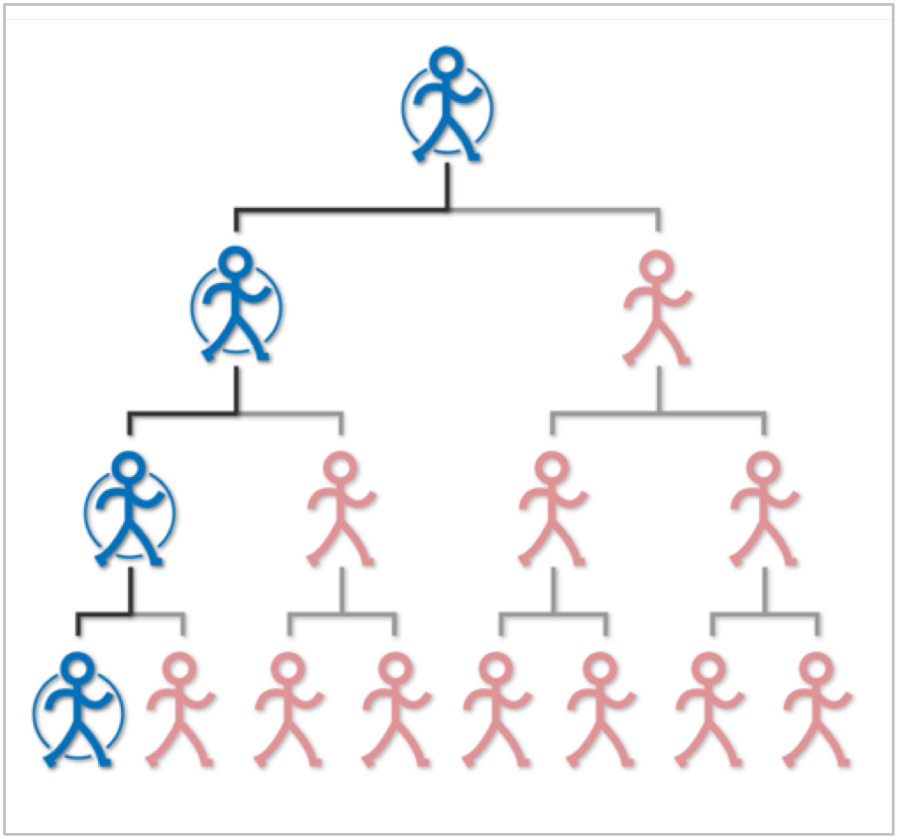

Image source: Johns Hopkins University.