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CENTER for GLOBAL HEALTH

Strategies to support the COVID-19 response in LMICs

A virtual seminar series

Resource Page

Contact Tracing in COVID-19

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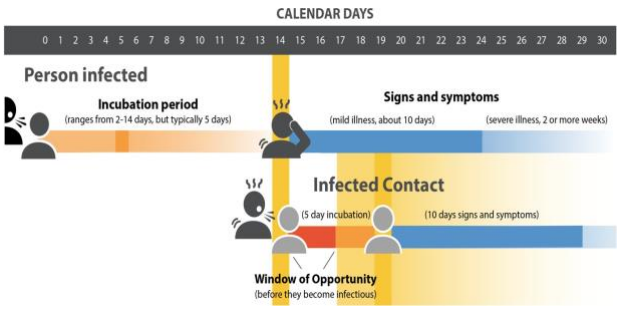
Summary/Key Points:

- Goal of Contact Tracing: **STOP COVID-19 transmission**!
  - Identify and support cases → access to medical care and social services
  - Identify contacts → notify about their exposure and offer services
    - **Limit the contact of both primary cases and contacts with other people.**
    - **NOT an all-or-nothing strategy**—even preventing some infections can have an impact on the total number of cases.

Definitions	
Case	Someone who has COVID-19 (positive laboratory test)
Contact	Someone who had contact with a case (during illness or 2 days before illness onset) *Kinds of Contact*: *Physical*, *Close** (within 6ft for 15+min), *Proximate* (>6ft apart but in same room for extended period) **Mask use can reduce risk of close contact!*
Isolation	Separate sick people from healthy people for duration of infectiousness (until at least 10 days after onset, improving symptoms, NO fever in past 3 days)
Quarantine	Restrict movement and contact of healthy people after exposure



- During the timeline of infection, there is a **window of opportunity** during the incubation period of the infected contact (before they develop symptoms and become infectious).
  - Although most people who are infected will become infectious within 3 days after exposure, **contact tracing efforts to find and ask them to quarantine are still useful until the end of their infectious period**, which can be ≥15 days after exposure.
  - In the setting of limited resources, **prioritize identifying contacts in the household** or those with the **closest or most frequent exposure**.

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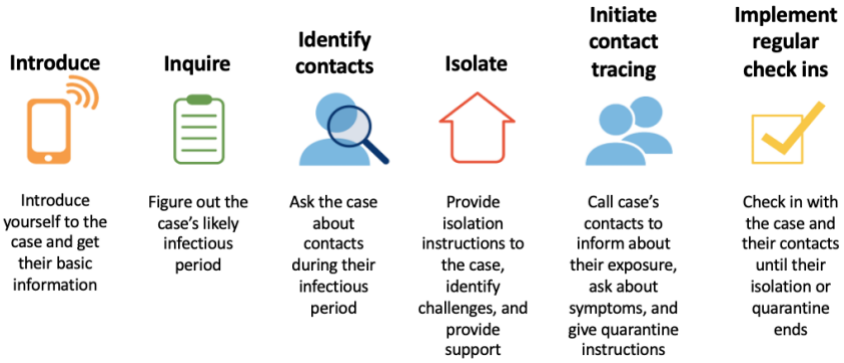
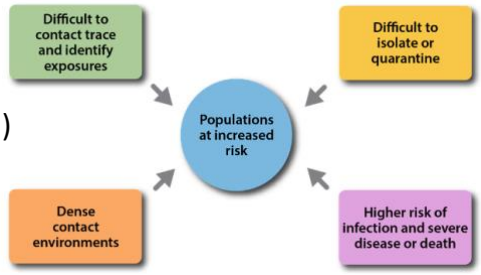
- General Steps of Contact Tracing:



- High-Risk Situations: Examples
    - **Dense contact environment** – mass transit, religious services, demonstrations, schools
    - **Difficult to contact trace and identify exposures** – homeless shelter (unknown contacts or unreliable recall)
    - **Difficult to isolate or quarantine** – intermediate care facility (facility design, disabilities, limited resources, unwillingness to cooperate)



- Ethical Considerations
    - A contact tracer can ask about and use **private information** only for the purposes of contact tracing.
    - A contact tracer can only learn about **confidential medical information** relevant to contact tracing and can only use it for contact tracing purposes.
    - Contact tracing programs are a **public good that must be balanced with individual rights** of privacy, confidentiality, and autonomy.
- Technological Tools
    - **Electronic Case Reporting**: automated, standardized reporting of positive tests to case investigators reduces time between diagnosis and call from public health team.
    - **Tracking Symptoms**: applications and text message reminders for cases/contacts to directly enter their symptoms into a database reduces time burden on team.
    - **Phone-to-phone notification of contact**: applications that use Bluetooth technology to immediately notify contacts of their exposure (but data on how well notifications align with potentially infectious contacts are lacking, systems to directly link with public health efforts remain unclear, and effectiveness would depend on the number of people using the app).

Online resources:

- COVID-19 Contact Tracing Course (offered by Johns Hopkins University): https://www.coursera.org/learn/covid-19-contact-tracing?edocomorp=covid-19-contact-tracing
- U.S. CDC Contact Tracing Tools: https://www.cdc.gov/coronavirus/2019-ncov/php/open-america/contact-tracing-resources.html

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