Identifying High-Risk Situations

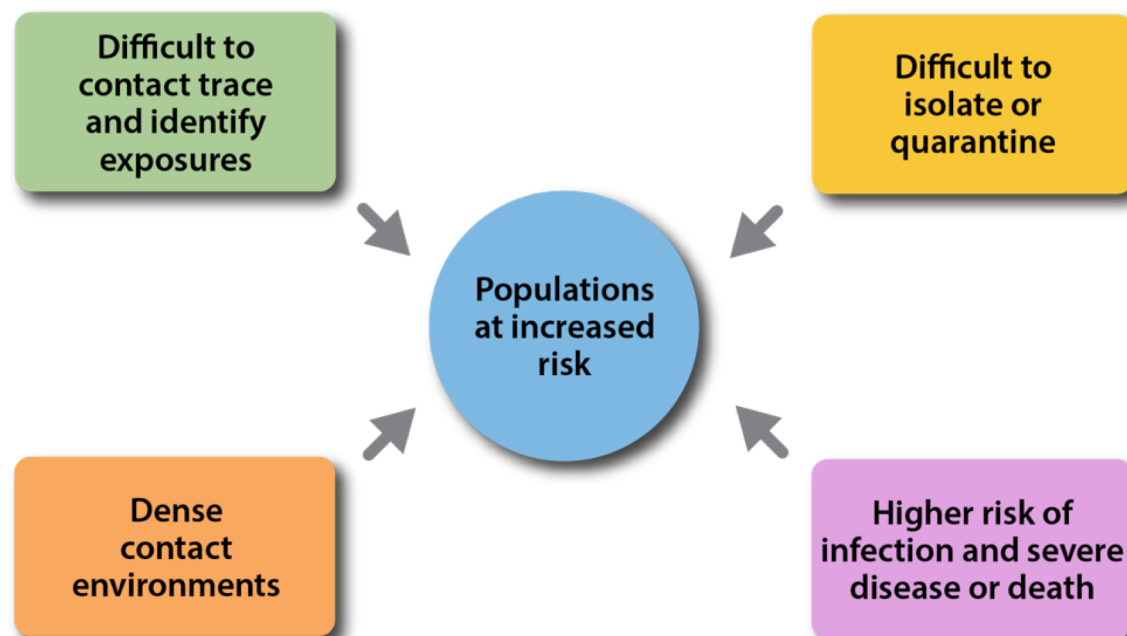Johns Hopkins Bloomberg School of Public Health

Important Terms

▶ **Congregate housing settings**
  ▶ A shared living environment where each individual or family has private living quarters and shares common dining, recreational, and other facilities

▶ **High-risk subpopulation**
  ▶ A segment of the population that has characteristics that increase the risk of infection or severe disease

Factors that Increase Risk for Infection and Severe Disease

▶ Populations at increased risk:
  ▶ Dense contact environment
  ▶ Difficult to contact trace and identify exposures
  ▶ Difficult to isolate or quarantine
  ▶ Higher risk of infection and severe disease or death

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

Dense Contact Environment

► Large crowds of people

► Close contact interaction
  ► Physical contact
  ► Within 6 feet for prolonged periods of time

► Can lead to a "super-spreading" event—an unusually high reproductive number

Dense Contact Environment: Examples

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► **Examples**
  ► Conferences
  ► Mass transit
  ► Religious services
  ► Demonstrations
  ► Workplaces
  ► Bars
  ► Gyms
  ► Schools
  ► Sporting events
  ► Concerts

Difficult to Contact Trace and Identify Exposures

► Close contacts may be unknown

► Recall of close contacts may not be reliable

► There may be too many contacts, and difficult to determine who is at highest risk for infection

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▶ **Example: homeless shelter**
  ▶ May not recall all contacts
  ▶ Contacts may be spread out through multiple jurisdictions
  ▶ Difficulty locating or testing exposed homeless contacts

Difficult to Isolate or Quarantine

► Unable to distance from others
  ► Design of house or facility
  ► Developmental disabilities
  ► Not enough resources
    ● Masks, gloves, staff
  ► Social pressures

► Unwilling to cooperate

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  - ▶ Not enough resources
    - Masks, gloves, staff
  - ▶ Social pressures

- ▶ Unwilling to cooperate

- ▶ **Example: intermediate care facility**
  - ▶ A home with individuals with special needs
  - ▶ Residents may be unable to cooperate
    - May not understand the concepts of hygiene and social distancing
    - Difficult to remove those who need care from infected people
    - Harder to maintain resources (masks, gowns) for effective infection prevention

Higher Risk of Infection and Severe Disease or Death

► May be more likely to get infected due to close contacts

► More likely to have underlying medical conditions (heart disease, respiratory conditions, poor immune system)

► May get exposed to the virus multiple times

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▶ **Example: assisted living facility**
  ▶ Congregate living situation
  ▶ Most residents over 60 years of age
  ▶ Multiple levels of care, including skilled nursing facilities, which care for individuals with illness or injury

Contact Tracers Must Help Identify High-Risk Situations

- ► Collect the necessary information to assess risk accurately:
  - ► Location and type of interactions
  - ► Contact information for venue
  - ► Names of close contacts
  - ► Specifics on flight number, movie name, conference name, class name, facility name

- ► The identification might depend on noticing a pattern between multiple calls

- ► Notify case that there may be additional follow-up

- ► **Immediately escalate to a supervisor**