

## Controlling the Spread of Contagious Diseases

# Quarantine Fact Sheet

Modern quarantine is used when:

- a person or a well-defined group of people has been exposed to a highly dangerous and highly contagious disease,
- resources are available to care for quarantined people, and
- resources are available to implement and maintain the quarantine and deliver essential services.

Modern quarantine includes a range of disease control strategies that may be used individually or in combination, including:

- Short-term, voluntary home curfew.
- Restrictions on the assembly of groups of people (for example, school events).
- Cancellation of public events.
- Suspension of public gatherings and closings of public places (such as theaters).
- Restrictions on travel (air, rail, water, motor vehicle, pedestrian).
- Closure of mass transit systems.
- Restrictions on passage into and out of an area.

Modern quarantine is used in combination with other public health tools, such as:

- Enhanced disease surveillance and symptom monitoring.
- Rapid diagnosis and treatment for those who fall ill.
- Preventive treatment for quarantined individuals, including vaccination or prophylactic treatment, depending on the disease.

Modern quarantine does not have to be absolute to be effective. Research suggests that in some cases partial quarantine (that is, quarantine of many exposed persons but not all of them) can be effective in slowing the rate of the spread of a disease, especially when combined with vaccination.

Modern quarantine is more likely to involve limited numbers of exposed persons in small areas than to involve large numbers of persons in whole neighborhoods or cities. The small areas may be thought of as "rings" drawn around individual disease cases. Examples of "rings" include:

- People on an airplane or cruise ship on which a passenger is ill with a suspected contagious disease for which quarantine can serve to limit exposure to others.
- People in a stadium, theater or similar setting where an intentional release of a contagious disease has occurred.
- People who have contact with a infected person whose source of disease exposure is

unknown—and therefore may be due to a covert release of a contagious disease.

In the aftermath of a disease outbreak or biological attack, there may be dozens of small "rings," each one including the people exposed to a single case of disease.

Implementation of modern quarantine requires the trust and participation of the public, who must be informed about the dangers of contagious diseases subject to quarantine before an outbreak or intentional release of biological agents, as well as during an actual event.

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