

## SITUATION UPDATE, 11:35 A.M. EST

## 1. Controlling Smallpox Spread

Countries need to control the spread of the smallpox outbreak while minimizing social and economic disruption. Imposition of major quarantine, border closures, and travel bans are national actions that would have significant international implications.

Because quarantine and border closures may have great international consequence, they should be addressed as international issues.

Historical methods of intervention to prevent the spread of smallpox include:

- · Early detection and isolation of cases
- · School closures during epidemic
- · Cancellation of big public gatherings
- · Mandatory vaccination
- · Travel advisories
- · National conditions for entry (e.g. vaccination certificates, health screenings at border)
- · Large-scale quarantine
- · Closure of borders

## 2. Large-scale Quarantine

Arguments for quarantine:

- · May stop or limit smallpox spread within and between countries
- May make response measures easier to execute
- May be the only way for countries without vaccine to stop smallpox spread
- Sends a strong signal to the public that the government is taking action
- · May forestall more extensive quarantine and/or draconian action later

Arguments against quarantine:

- · Its effectiveness has not been clearly demonstrated
- Foreign nationals will be trapped inside quarantine zones
- · Has major economic consequences, including disruption of global trade flow
- · May provoke the public to flee
- Enforcement requires resources and management of complex logistics
- It is unclear when it is safe to end quarantine

## 3. Border Control

The WHO or independent national travel advisories are one border control option. This approach was used during the SARS epidemic, and in the past, some countries have used travel advisories to wage economic warfare. For example: economic competitors used travel advisories in an attempt to harm India during a plague outbreak in 1994.

Another border control measure is to set national conditions for entry from smallpox infected countries. During the SARS epidemic, temperature screenings were conducted at borders in Canada, China, and Singapore. However, it is not clear how cost-effective this measure was: 13 million people were screened, and only 12 people were found to have SARS.



Total border closure is the most severe method, and has been instituted only once in the past 50 years after a traveler returning home to Yugoslavia from the Middle East became ill with smallpox in 1972. All countries surrounding Yugoslavia closed their borders to prevent the spread of smallpox. Borders were kept closed for 2 months while the entire population of 20 million people was vaccinated by the communist Yugoslavian government. It is not clear to what extent border closures helped to end this smallpox outbreak.

If countries decide to close their borders, shortages of food, oil, and other goods will develop rapidly, and the economic impact will be great. For example, the value of the import/export business into the EU alone is 28 billion euros per day. If the Ambassador Bridge spanning the US-Canadian border were closed for just two weeks, it would cost \$2 billion in losses to the American and Canadian economies.