

Preparing for which Pandemic?

Humanitarian Pandemic Preparedness (H2P) Initiative
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Introduction

The number and weight of the uncertainties concerning the next human influenza pandemic are such that the development of credible, detailed scenarios is practically impossible. Among such uncertainties, the following six are particularly worth mentioning:

- a) The date of onset of the next influenza pandemic is unpredictable (any time from sometime next week to sometime next decade or so).
- b) The speed of transition from the current pandemic phase 3 to a full-fledged pandemic phase 6 is unpredictable, ranging from “overnight” to several months or even years.
- c) The virulence of the virus subtype responsible for the pandemic is unpredictable, with case fatality rates ranging from what is typical of seasonal flu to the – fortunately – unlikely, “end of civilization” levels of the current H5N1 human cases.
- d) Risk groups for severe and fatal infections cannot be predicted with certainty.
- e) The effectiveness and timely availability of pharmaceutical interventions (primarily antiviral drugs, vaccines and antibiotics) is uncertain.
- f) The level of social, economic and possibly even political disruption is unpredictable and will vary from country to country. It will only partly depend on the severity of the pandemic.

The scenario outlined in this document, therefore, is in no way a “predictive” one. It depicts a near-worst-case scenario and is presented here only as a consensus framework, meant to guide the planning and implementation of the H2P activities.

The Scenario

1. Once the pandemic will start, geographical spread will be rapid: time for final planning and preparations will be limited to a few weeks at most.
2. Virtually all communities on earth will experience outbreaks: roughly 1 person in three in the world will become ill during a period of up to approximately 1 ½ years.
3. Communities will experience one to three outbreaks (“pandemic waves”) of the duration of 6 - 12 weeks each. The characteristics of the first wave (in terms of fatalities) will not be predictive of what will happen with the following ones.
4. The virus subtype responsible for the pandemic will show substantial virulence: at least 2% of the people who have contracted the disease (and possibly much more) will actually die from it.
5. Although some groups within the population will be markedly more at risk for contracting the disease and others may be more at risk of dying from it, it is impossible to say which ones in advance.
6. Supplies of vaccines and antiviral drugs will be inadequate in developing countries. Even in developed countries, vaccines are unlikely to substantially reduce mortality and morbidity for at least the first six months of the pandemic.

7. Healthcare systems will be overwhelmed and not capable to cope with the large number of people who will suddenly fall ill: care will have to be provided at the community and household level. Many routine, non-flu-related health services will also be unavailable during the pandemic waves.
8. More in general, a variable but generally severe level of disruption is to be expected in the delivery of the services provided by the State. Governmental contingency plans for response to a pandemic will encounter colossal difficulties and will only be partially effective in limiting its adverse consequences.
9. Even more in general, severe social and economic disruption is to be expected: developed countries are particularly vulnerable because of the highly interdependent nature of more advanced societies, whilst developing countries are particularly vulnerable because of the intrinsic, pre-existing vulnerability of large sectors of the population.
10. In many countries, localized and even generalized security problems (from erosion of law and order to open conflict triggered by the pandemic crisis) cannot be ruled out.
11. For several reasons, international assistance on a large scale will not be an option.
12. The community-level itself will be affected: massive absenteeism of staff (possibly above 50%, because of illness, need to care for the family, school closures, fear, etc.) and logistical difficulties (movement, communications, basic services) will substantially limit the capacity of peripheral governmental structures and civil society organizations to respond.

The Household Level

At the household level, the above 12 assumptions will translate into the following picture:

13. At least one of the family members will contract the disease during one of the pandemic waves: there will be many families in which all potential care givers are ill at the same time & unable to care for their families.
14. Because of illness, of the need to care for the ill, of fear, or as a consequence of the containment measures and/or of the difficulties in movement/transportation, many of the family members will de facto be confined at home during the peak intervals of the pandemic waves.
15. Children will spend most of the time out of school for extended periods of time.
16. In the vast majority of severe cases, the family will not be able to count on hospital-level health care.
17. Some families will be able to count on at least some community-level health care services, but many won't.
18. Regardless of its affluence (and of the development level of the country), the family's food security may be challenged. Such challenge is unlikely to result in clinical malnutrition for the general population.
19. The family will experience variable levels of difficulty in accessing key essential services (water, energy, telecommunications, transport, education, energy, finance) during the peak intervals of the pandemic waves. Some of such services may be interrupted altogether.
20. Regardless of its affluence (and of the development level of the country), the family's capacity to produce an income and to protect its assets may be challenged.
21. The family may experience security problems (lawlessness, conflict).