



This is very important as it will determine the scale and sometimes detail of the response. Whether there should be a whole society response or a response confined to the health care sector as was the case in 2009.

WHO had a very simple scale in its 2009 guidance *Mild, Intermediate* and *Severe* though eventually they referred to the 2009 pandemic as *Moderate* rather than *Intermediate* presumably as moderate communicated better. However there was no mechanical definition. A country that did have a formula for severity was the United States who produced a 1 to 5 scale based on Case Fatality Rate see United States Department of Health and Human Services and Centers for Disease Prevention and Control. Interim pre-pandemic planning guidance: Community strategy for pandemic influenza Mitigation in the United States. Dec 2006

[http://www.pandemicflu.gov/plan/community/community\\_mitigation.pdf](http://www.pandemicflu.gov/plan/community/community_mitigation.pdf) But that proved very hard to measure and certainly could not be measured with any precision early on.

It is important to note that severity has never been part of the definition of a pandemic in WHO guidance.

## **There is an expectation that pandemics should be graded by severity**



But there are difficulties:

- severity varies from country to country;
- it can change over time;
- some relevant information is not available initially;
- key health information includes medical and scientific information:
  - epidemiological, clinical and virological characteristics.
- There are also social and societal aspects:
  - vulnerability of populations;
  - capacity for response;
  - available health care;
  - communication; and
  - the level of advance planning.

The best discussion on this area is at <http://www.who.int/wer/2009/wer8422.pdf>  
and  
[http://www.who.int/csr/disease/swineflu/assess/disease\\_swineflu\\_assess\\_20090511/en/index.html](http://www.who.int/csr/disease/swineflu/assess/disease_swineflu_assess_20090511/en/index.html).

## What is meant by 'mild' and 'severe'? Its not a simple scale



- **Death ratio.** Expectation of an infected person dying (the Case Fatality Ratio).
- **Number of people falling ill with respiratory illnesses at one time — 'winter pressures'.** Pressure on the health services' ability to deal with these — very related to preparedness and robustness.
- **Critical service functioning.** Peak prevalence of people off ill or caring for others.
- **Certain groups dying unexpectedly,** e.g. children, pregnant women, young healthy adults.
- **Public, political and media perception** — very labile

**Conclusions** Not easy to come up with a single measure.

May be better to state what interventions/countermeasures are useful and justifiable (and what are not).

[http://www.who.int/csr/disease/swineflu/assess/disease\\_swineflu\\_assess\\_20090511/en/index.html](http://www.who.int/csr/disease/swineflu/assess/disease_swineflu_assess_20090511/en/index.html) and  
<http://www.who.int/wer/2009/wer8422.pdf>

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