

Second Meeting
Geneva, 6-10 December 2004

Meeting of Experts
Geneva, 19-30 July 2004
Item 6 of the agenda

Definitions of Unusual and Suspicious Outbreaks of Diseases and Alleged Use

Submitted by the Islamic Republic of Iran

1. The disease outbreaks due to natural, unusual and suspicious causes are under consideration in the Meeting of Experts and are subject of concern, therefore clear distinction between unusual, suspicious outbreaks and alleged use is necessary to prevent further complications. There is no common denominator and universally acceptable definition of these terms. Any international measure, in enhancing capabilities in combating alleged use and suspicious outbreaks of diseases, has to be based on internationally recognized definition. The followings are preliminary findings submitted for future consideration by experts.

Definition of an unusual outbreak

2. It should be noted that almost all unusual outbreaks of disease in humans, plants or animals are natural in origin.
3. This definition is applicable to outbreaks of disease in animals (epizootics) and plants.
4. An unusual outbreak of disease may be defined as an outbreak that is unexpected within the prevailing context of environmental parameters. It may, therefore, be unexpected for one or more of the following reasons:
 - (i) The disease is not endemic within the affected region and locally acquired cases have not been recorded previously.
 - (ii) The disease, although prevalent in the affected region, becomes epidemic outside its normal season.

- (iii) The reservoir host and/or insect vector of the disease do not occur in or were eradicated from the affected region.
- (iv) The disease appears to be transmitted by an uncommon or unusual route, e.g. airborne.
- (v) Outbreak of the disease in a population with a high level of immunity due to vaccination. This may suggest that the cause is a modified agent against which routine vaccination may not be effective. Such modification may be due to deliberate genetic manipulation of the disease agent.
- (vi) The disease is caused by an agent with an unusually broad antibiotic resistance pattern.
- (vii) Outbreak of disease in an unexpected population subset.

Definition of a suspicious outbreak

5. An outbreak might be suspicious because epidemiologic features suggest an unnatural origin. Also, the etiologic agent may differ from agents naturally found in the environment, as would be the case if the agent were genetically engineered; in such an event, the unusual phenotype of the agent would signal something anomalous.

6. In addition to unusual epidemiologic features, devices used to disseminate the agent and can help identify a suspicious outbreak

Definition of alleged use

7. Alleged use can be grouped into four main categories

- (i) BTW have been used;
 - (ii) Field tests have been conducted with BTW;
 - (iii) An accident has taken place in the vicinity of a facility suspected of developing BTW;
 - (iv) Criminal or terrorist attack
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