

AD HOC GROUP OF THE STATES PARTIES
TO THE CONVENTION ON THE PROHIBITION
OF THE DEVELOPMENT, PRODUCTION AND
STOCKPILING OF BACTERIOLOGICAL
(BIOLOGICAL) AND TOXIN WEAPONS
AND ON THEIR DESTRUCTION

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THE RELATIONSHIP BETWEEN INVESTIGATIONS OF ALLEGED USE OF BTW
AND UNUSUAL OUTBREAKS OF DISEASE AND CHALLENGE INSPECTIONS

Working paper submitted by South Africa

INTRODUCTION

The alleged use of a biological or toxin weapon would be difficult to establish for several reasons:

- The disease (human, animal or plant) could be similar to endemic disease;
- The disease entity may not be recognized as the consequence of the use of biological and toxin weapons (BTW);
- It may not be clear which country is the aggressor or target;
- Considerable time may have elapsed since the alleged use;
- Investigation could be hazardous, due to a state of hostilities or due to the disease itself;
- The evidence may have been obscured by defensive measures employed; and
- The alleged use may be in a remote region where investigation is difficult and sampling and analysis impossible.

When the use of BTW is alleged, a credible investigative response needs to be prompt, comprehensive and credible. This will only be possible if the investigative team is professionally structured and fully supported by all States Parties to the Convention.

There are distinct stages through which an investigation could develop, ranging from an investigation of an unusual outbreak of disease, an investigation of alleged use, to the imposition of a challenge-type inspection. These stages are distinct entities and must not be confused even though similar methods of investigation could be involved.

INVESTIGATION OF UNUSUAL OUTBREAKS OF DISEASE

An unusual outbreak of a disease could be described as the situation when a state decides that an outbreak of a specific disease under humans, animals or plants is unusual for that state, either because of the nature of the disease or the conditions under which the disease appeared.

The management of such a situation is primarily the responsibility of the government of that state. International involvement can only occur with the approval of the government of that state and under its control.

The state can decide whether to investigate such an outbreak itself. It is the prerogative of that government to ask for the support of international organizations or governments of other states in such an investigation. It will also be their decision as to who will be in charge of and primarily responsible for the investigation.

The affected state can submit a report to the appropriate international organization such as the World Health Organization (WHO), International Organization of Epizootic (OIE) or International Plant Protection Convention (IPPC). This would become necessary when neighbouring and other countries may be affected by the disease and to prevent it from spreading.

The WHO (or one of the others) should be responsible for coordinating such an investigation. If it is found that there is a possibility or a suspicion of alleged use of BTW, the scope of the investigation will then change to an investigation of alleged use, and it may be necessary to transfer the coordinating responsibility to a future BTWC organization.

INVESTIGATION OF ALLEGED USE OF BTW

An investigation of alleged use of BTW can only be triggered by an allegation. Such an allegation can be lodged under a number of circumstances, for instance actual reports of use, accidents, etc., as well as unusual outbreaks of disease that had been found not to have a natural cause.

The investigation will be conducted mainly on the territory of the complaining state although investigations in the accused state can also be part of an investigation. In these cases the investigation should primarily be conducted by or under control of an appropriate international body or possibly under a future organization for the BTWC. Although the authorities of the complaining state will naturally be involved and may conduct their own investigation, these authorities should, however, also ensure that the international investigation is able to complete its task effectively and that the necessary support and assistance is provided to this end. The investigating team should be provided full access to relevant individuals, facilities. The team should also be allowed to examine alleged victims including the taking of samples so as to enable them to come to a conclusion.

Investigations on the territory of the accused state will need to be conducted with some degree of consent of that government, and would only be initiated once the investigating team is convinced that the allegation is not frivolous and that there is sufficient evidence pointing to a specific facility or facilities. The inspection will then need to be in the form of a challenge-type inspection.

An investigation of alleged use could also be conducted in circumstances where an allegation has been made that there has been an accident on the territory of a state or that a state has used BTW on its own territory. In such cases the investigation would be similar to challenge-type inspections.

A readily accessible database on natural disease patterns should be established to aid these investigations.

Three types of investigations of alleged use could be conducted:

i. Investigation of alleged use of BTW against humans

The direct use of BTW against humans has been comprehensively discussed and it clearly has a powerful emotional and psychological effect, especially if use has been suggested.

The pattern of the spread of a disease spread would be indicative of the natural outbreak of such a disease. Infectious diseases usually have a clear pattern of spread between contacts, while those with a non-human reservoir or vector also have characteristic patterns of spread which could be detectable against the natural epidemiological background.

An investigation would concentrate on the history of spread, laboratory analysis of the organisms involved and the natural incidence of the disease within this and similar communities.

ii. Investigation of alleged use of a BTW against plants

Superficial analysis has shown that deployment of biological and toxin weapons (BTW) which damage the capacity of a country to produce food or vital cash crops over an extended period will be more difficult to detect in the long term than the use of BTW directed at humans.

The use of BTW directed at plants could be construed to be bacterial, fungal, viral or arthropod.

For many plant pathogens to be efficiently transmitted, some form of arthropod vector is often necessary. Thus an investigative team should always include an experienced entomologist.

Many plant pathogens take considerable time to become established and distinguishable, and may only be detectable as a reduced yield at harvest. It will therefore also, as in the case of investigation of alleged use of BTW against humans, be necessary to establish natural disease patterns.

Chemicals such as herbicides or plant hormones could also be used as anti-crop agents and these need to be discriminated from infectious agents in any investigation. This type of investigation would fall within the ambit of both the BWC and the CWC.

iii. Investigation of alleged use of BW against animals

The use of pathogens directed at animals could be bacterial, viral, fungal or arthropod and the services of an entomologist will therefore also be needed in this type of investigation.

Animal diseases caused by BTW could be endemic or epidemic and the onset could be insidious and difficult to detect.

An investigation would have to differentiate between chemical/hormone type weapons, or perhaps bacterial toxins which could have long term effects after a single application and which could be difficult to detect some time later.

THE RELATIONSHIP BETWEEN INVESTIGATIONS OF UNUSUAL OUTBREAKS OF DISEASE AND ALLEGED USE OF BTW

Almost all unusual outbreaks of disease will be natural in origin. However, the possibility of the use of BTW should be borne in mind when investigating an unusual outbreak of disease. Once evidence has been found which points to the possible use of BTW, then the nature of the investigation would change from that into an unusual outbreak of disease to an investigation of alleged use. The possibility of frivolous allegations, must also, however, be borne in mind. It would be important to incorporate proper safeguards against frivolous allegations into a future protocol.

It is expected that investigations into alleged use of BTW will only be used in instances where the grounds for the suspicion is clear-cut, especially because of the implications to bilateral and multilateral relations. It is more likely that investigations of alleged use will flow from investigations into unusual outbreaks of disease.

CHALLENGE-TYPE INSPECTIONS

A challenge-type inspection could be conducted in an area or facility in a state if there is sufficient suspicion that the state/facility is busy with some activity contravening the provisions of the BTWC. Such an inspection should be conducted under the direction of an organization responsible for the administration of a verification protocol for the BTWC. Proper safeguards to ensure that these inspections are only used when there is real evidence that the provisions of the Convention have been violated, should be established.

Inspectors conducting a challenge-type inspection should be able to use all tools available, including sampling and identification, etc.

RELATIONSHIP BETWEEN INVESTIGATIONS OF ALLEGED USE AND CHALLENGE INSPECTIONS

An investigation of alleged use will in most cases result in a challenge-type inspection as the last measure to be utilized in the effort to prove or disprove the validity of an allegation. This could occur when the investigation has led to evidence indicating that a specific facility or facilities in the accused state may have been involved in some or other way in the use of BTW.

A challenge-type inspection will not only be limited to investigations of alleged use. They may also be used in other investigations of alleged non-compliance.
