



INTERPOL Bioterrorism Prevention Unit Bulletin

Issue: Precautionary measures for law enforcement against zoonotic diseases infection

Context:

Zoonotic diseases, including COVID-19, Ebola Virus Disease, Avian Influenza (H5N1), Plague, Anthrax and Monkeypox, represent significant threats to human health. They are just a handful of disease outbreaks that have recently made international headlines. These diseases all share a common feature - they are zoonotic - meaning they affect both human and animals alike. 60% of human infectious diseases and more than 75% of emerging diseases are zoonotic.

Law enforcement need to be aware of the risks involved in their activities when interacting with animals, animal products or people carrying transmissible diseases.

Zoonotic diseases characteristics

What are the typical signs and symptoms of infectious diseases?

Each zoonotic disease comes with its own set of signs and symptoms that differ from one species to another. Some signs may not always be visible in certain individuals or species, making it difficult to recognize and/or detect.

The health condition of an animal is often indicative of whether it is potentially infectious. Living animals often show signs of infection or ill-health, such as dehydration, poor body condition, poor coat condition, crouching or huddled posture, diarrhea and vomiting, bloating, discharge from orifices, scratching and laboured breathing.

Similarly, infected individuals are likely to show signs, such as skin lesions, coughing, diarrhoea and vomiting and/or laboured breathing.

How do people become infected with zoonotic diseases?

Depending on the disease, zoonotic disease transmission can occur through:

- *Human-animal interactions:* generally through inhalation, ingestion, or other mechanisms resulting in the contamination of mucosa. Sources of the disease include body fluids, secretions and excretions, and lesions (e.g. Ebola, Monkeypox). Aerosols may also transmit infection, particularly in confined spaces (e.g. anthrax, avian influenza). Contaminated

surfaces or equipment/vehicles can transmit some agents depending on their persistence in the environment. Some organisms are capable of surviving and remaining infectious in animal products (e.g. anthrax, Monkeypox). Therefore, manipulation or consumption of such products, including bush meat, may pose a risk of infection. Insects infesting animals are also a significant mode of transmitting disease agents (e.g. bubonic plague, tularaemia).

- *Human-human interactions*: The risk varies depending on the form of the disease, the agent's ability to spread in people and the routes of transmission. Often, people most at risk are healthcare workers and close family members. However, some diseases (e.g. pneumonic plague, COVID-19) have the potential to spread widely in human populations.

How do you prevent contamination by zoonotic diseases?

People can protect themselves from zoonotic infection by following specific prevention and control measures in outbreak areas. These include frequent hand washing, avoiding direct or indirect contact with individuals or animals (dead or alive) suspected of, or confirmed to have contracted the disease.

Avoiding scratching or biting through the use of proper restraints or protective equipment will also reduce the risk of exposure when handling live animals.

Similarly, avoiding direct contact and manipulation of animal products with the potential to harbour zoonotic disease agents will reduce the risk of exposure. This can be achieved by wearing gloves and reducing the risk of puncture injuries.

Any equipment that has come into contact with potentially infectious people, animals or contaminated animal products, should be rigorously cleaned and/or decontaminated to protect themselves, their colleagues and loved ones.

What treatments exist against zoonotic diseases?

Prophylaxis, such as vaccines, exist for some diseases (e.g. leptospirosis). Wherever possible and recommended, law enforcement officers at higher risk of disease exposure should get vaccinated in accordance with public health authority directives.

How should law enforcement and/or first responders act if they suspect they are faced with infected people or animals?

If law enforcement are required to respond to an incident involving a person(s) or animal(s) infected/suspected to be infected, they should wear appropriate Personal Protective Equipment (PPE), as advised by public health authorities. PPE is needed to protect an official's eyes, nose, mouth and hands, and avoid contact with bodily fluids that may contain infectious agents. It is essential to apply good hand hygiene and to monitor eventual onset of symptoms.

Front line officers should be provided with the contact details of appropriate national public health and veterinary agencies for consultation when facing situations involving unusual or suspicious material, people or animals.

Further details on how to respond can be found in the following video:

<https://youtu.be/ptGwNVCs8Vg?t=8m48s> (English)

<https://youtu.be/TgHax3rXFLM?t=9m12s> (French)

Additional resources :

- Information on current outbreak situations can be found on the WHO website: <https://www.who.int/emergencies/disease-outbreak-news>
- Basic biosafety measures to prevent contamination when dealing with a person showing signs or symptoms of an infection transmissible through direct contact suspected of being able to transmit disease through contact with bodily fluids (such as for Ebola Virus Disease): <https://youtu.be/ptGwNVCs8Vg>
- COVID-19 Resources for Law Enforcement (also apply to many respiratory zoonotic diseases)