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African Region

An overview of Bundibugyo virus disease (BVD)

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About Ebola diseases and Bundibugyo virus disease

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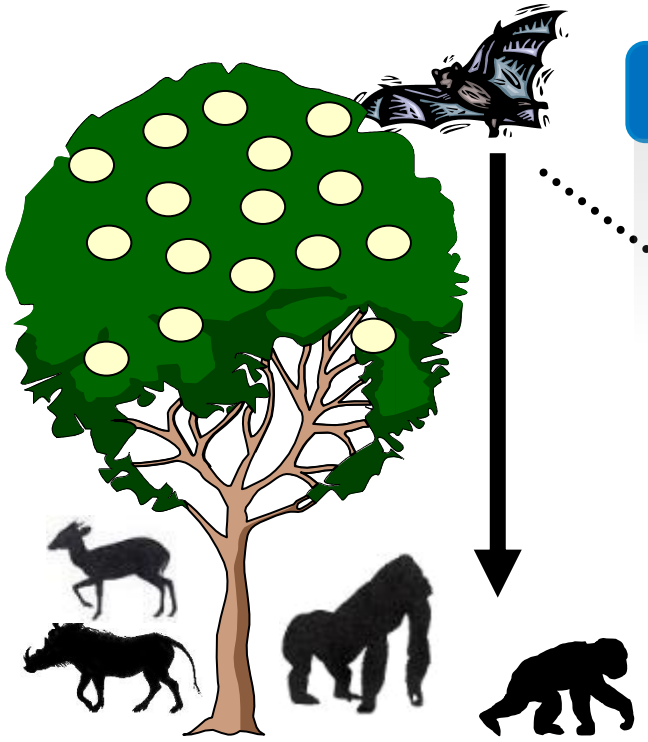
- Ebola diseases were first identified in **02 simultaneous outbreaks in 1976:**
  - one SVD outbreak in South Sudan (at the time Sudan) and one EVD outbreak in the Democratic Republic of the Congo (at the time Zaïre).
- **Ebola disease (EBOD)** is a severe, often fatal illness caused by viruses belonging to the *Orthoebolavirus* genus.
- To date, **06 species of Orthoebolaviruses** have been identified, with 3 of them associated with large outbreaks:
  -Bundibugyo virus (BDBV) causing Bundibugyo virus disease (BVD)
  -Ebola virus (EBOV) causing Ebola virus disease (EVD)
  -Sudan virus (SUDV) causing Sudan virus disease (SVD)

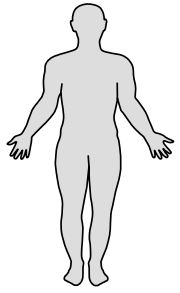
EBOD type	No of outbreaks
▪ BVD	3
▪ EVD	37
▪ SVD	9
Total	**49**

Transmission of Orthoebolaviruses



1. Virus reservoir: fruit bats

The virus is thought to maintain itself in fruit bats.



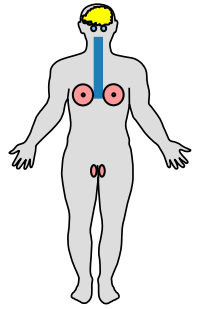
2. Epizootics in animals

- Infected fruit bats enter in direct or indirect contact with other animals and pass on the infection.
- Large-scale epidemics in primates or mammals (e.g. forest antelopes) can happen.

3. Primary human transmission

Humans are infected either through:

- handling infected dead or sick animals found in the forest (more frequent); or
- direct contact with infected bats (rare event).

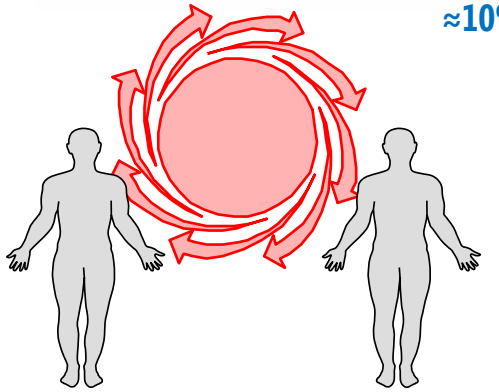


4. Secondary human transmission

- Secondary human-to-human transmission occurs through direct contact with the blood, secretions, organs or other body fluids of infected persons.
- High transmission risk when providing direct patient care or handling dead bodies (e.g. funerals).

5. Virus persistence

Persistence of virus in body fluids (semen mostly) of survivors.



≈10% Healthcare workers

Who is at risk

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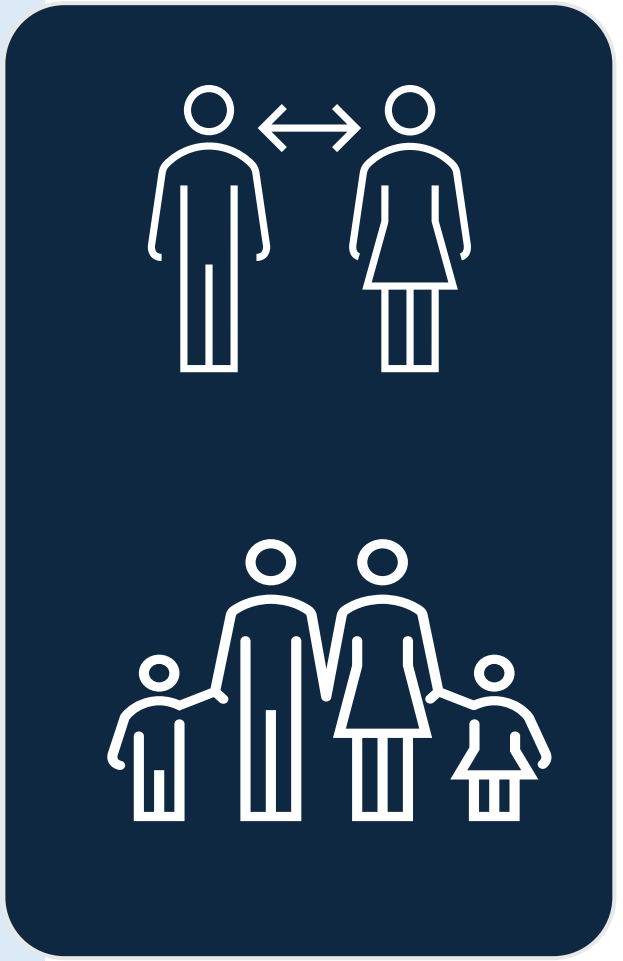
- People with contact with sick or dead animals in rainforest
- Family members, care givers or others in close contact with people sick with Ebola disease exhibiting symptoms.
- Healthcare workers and medical personnel caring for Ebola disease patients without appropriate and adequate protection (PPE)
- Laboratory workers handling specimens from Ebola disease patients without appropriate and adequate protection (PPE).
- People handling bodies of people who died of Ebola disease without appropriate and adequate personal protection.
- Traditional healers caring for Ebola disease patients.



Clinical features of Ebola disease

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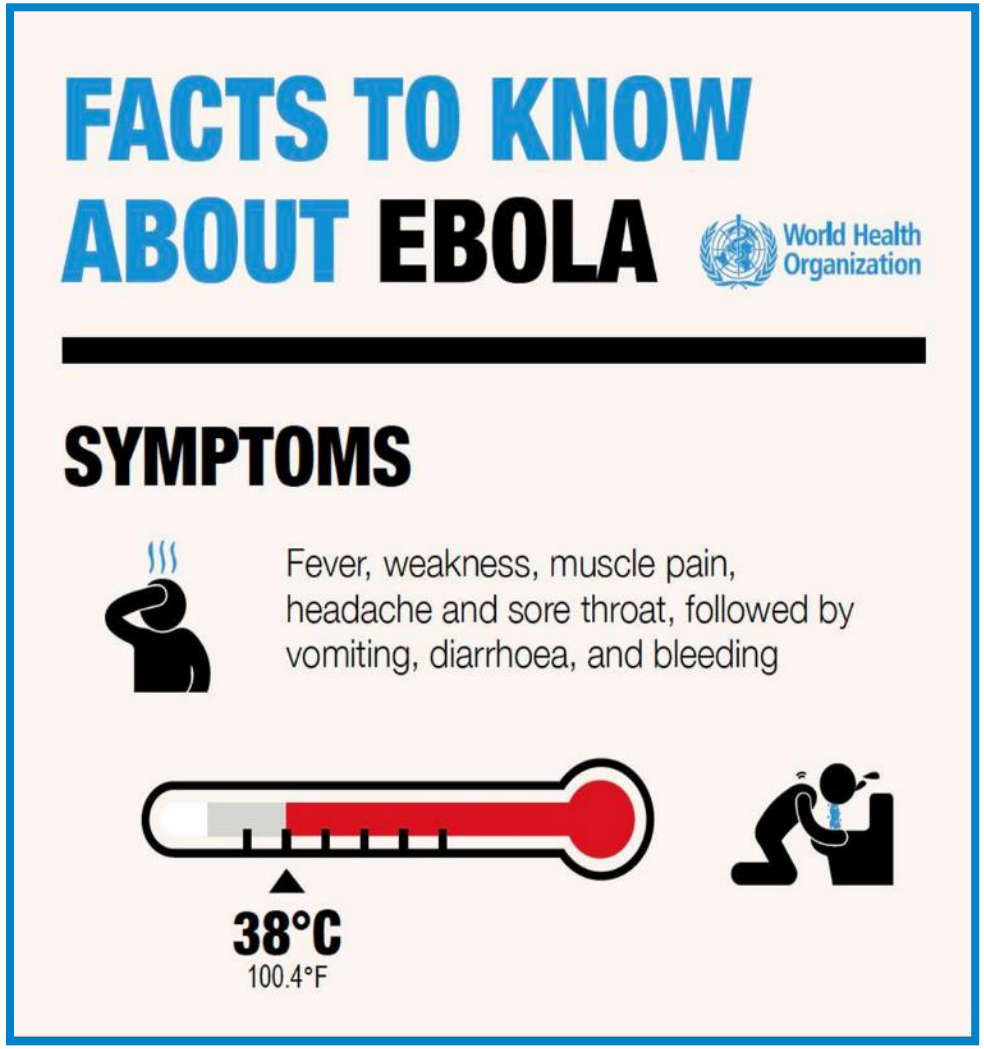
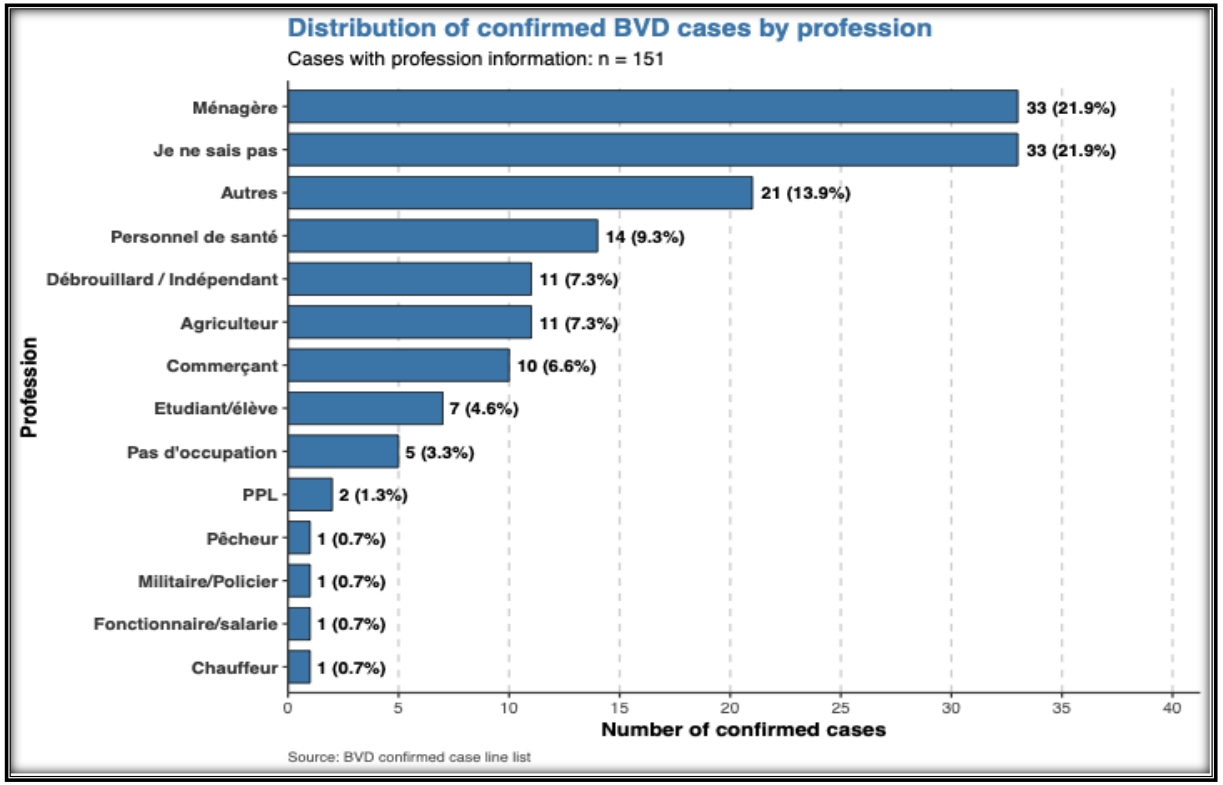
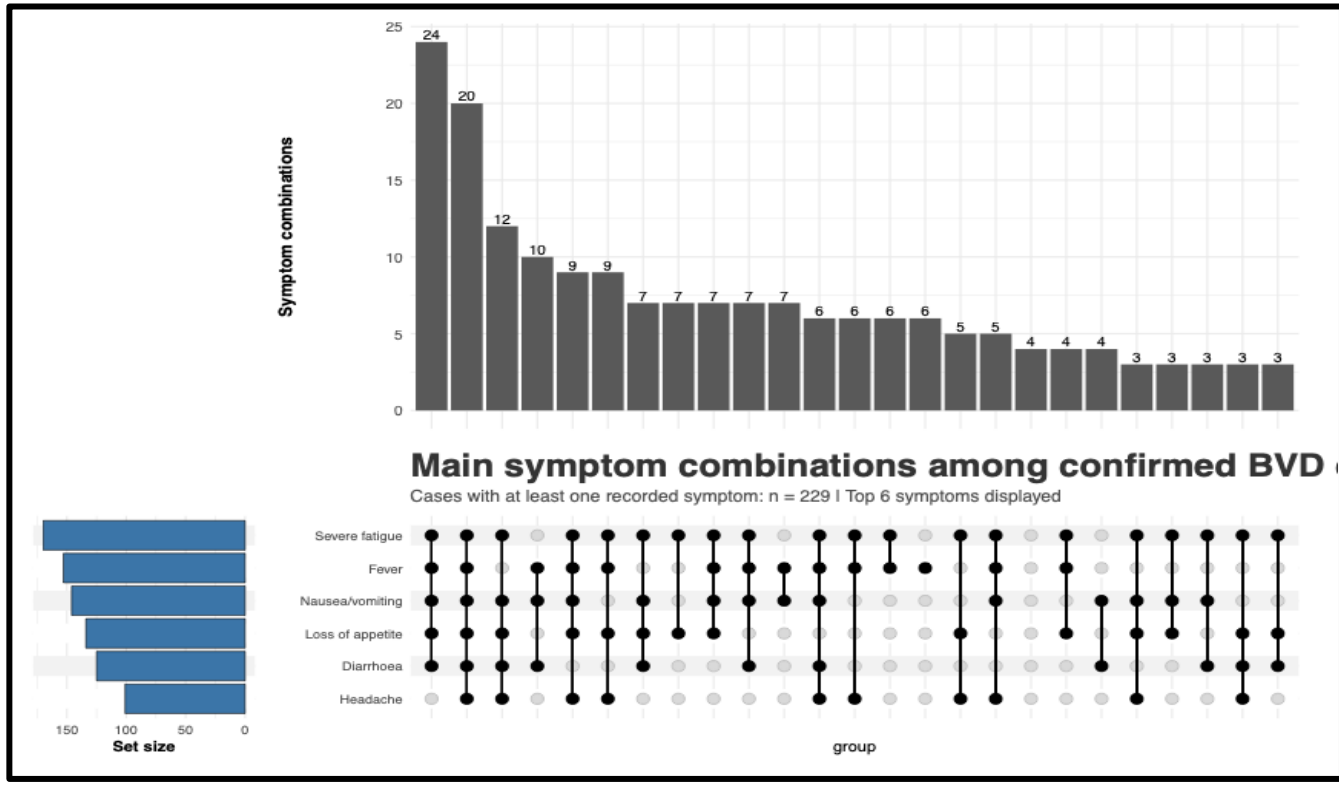
- Incubation period is **2 - 21 days**.
- Humans **are NOT infectious until they develop symptoms**.
- Initial symptoms can include **sudden onset of fever and fatigue, muscle pain, headache and sore throat**.
- Usually followed by vomiting, diarrhoea, rash, impaired kidney and liver function, spontaneous bleeding internally and externally (in some patients).
- **Symptoms are non-specific**; clinical diagnosis may be difficult, with many differential diagnosis
- **Patient history** is essential and should include:
  - **Contact with a dead or sick animal**;
  - **Contact with a suspected, probable or confirmed Ebola disease patient**



BVD DRC Situation update – confirmed cases by profession and onset of symptoms

June 7, 2026





- **Incomplete profession data:** only **151 cases** documented; high **"Je ne sais pas"** category limits occupational risk interpretation.
- **Key exposure groups:** *Ménagères* are the most represented group, followed by **health workers** , suggesting potential household and healthcare-associated exposure.
- **Community-based profile:** farmers, informal workers, traders, students and unemployed cases indicate transmission across community settings, not one single profession.

- **Symptoms cluster strongly:** confirmed cases often present with multiple symptoms rather than a single isolated symptom.
- **Most common combinations:** severe fatigue, fever, nausea/vomiting, loss of appetite and diarrhoea appear repeatedly in the leading symptom profiles.

Source: Case based data

Ebola **disease outbreak control**

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- **Good outbreak control relies on applying a package of interventions closely intertwined and coordinated as shown in previous slides:**
  - **Empowering communities in understanding, defining and adhering to outbreak control interventions**
  - **Surveillance and contact tracing**
  - **Laboratory support for confirmation**
  - **Case management**
  - **Infection prevention and control in health facilities & public health safety measures in communities**
  - **Safe and dignified burials**

Diagnosis and care of those infected

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Definitive diagnosis requires laboratory testing:

- (RT-PCR) assay
- IgG and IgM antibodies ELISA
- Handling and processing specimens requires suitably equipped laboratories under appropriate biological containment conditions
- HCWs collecting samples should be trained

Caring for patients with Ebola disease

- Chances of survival can be improved through:
  - Early, intensive supportive care such as monitoring fluids and electrolytes balance and vital signs, and careful rehydration.
  - Supportive drug therapy including painkillers, antiemetic for vomiting, anxiolytic for agitation, +/- antibiotics and/or antimalarial drugs.
- There are no specific approved therapeutics for other Ebola diseases apart from EVD.
- There are however candidate therapeutics under development and may be rolled out through clinical trials.

Key components for Ebola disease control

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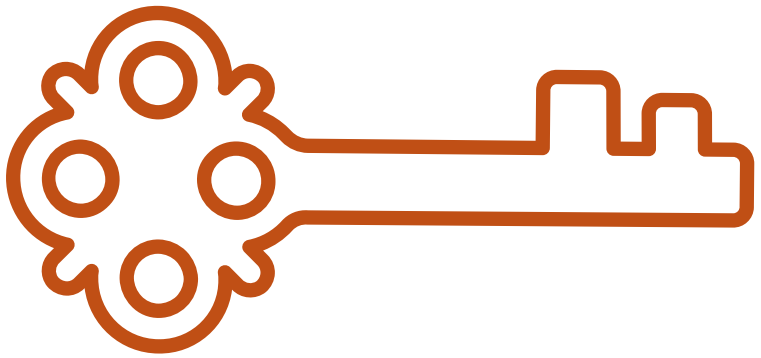

- Community and national leadership
- Reducing the risk of human-to-human transmission
  - (HFs & Communities)
- Case detection and care for sick people
- Reducing the risk of wildlife-to-human transmission

Significance of the current BVD Outbreak

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No licensed vaccine to date for BVD

- Several candidate vaccines, including replicating vesicular stomatitis virus vector and non-replicating chimpanzee adenovirus vector, have been reviewed in 2026
- As part of outbreak response, a CORE protocol to evaluate the safety, tolerability, immunogenicity, and efficacy of vaccine candidates is available.

No approved specific therapeutics against BVD:

- Several candidate therapeutics are at different stages of development and evaluation, some have shown some level of efficacy in non-human primates, alone or in combination, against BVD.
- Phase 1/2 studies are in process to assess pharmacokinetics and safety profile.
- Experts' deliberations on candidate therapeutics prioritization against Bundibugyo virus were held in May 2026.
- As part of outbreak response, a CORE protocol for a clinical trial is available.

https://www.who.int/teams/blueprint/ebolavirus

- Late Outbreak detection
- Multiple locations – wide geographic spread
- Cross border transmission
- Weak public health systems with HR deficiencies
- Community misunderstandings – beliefs and culture
- Misinformation and disinformation
- Clinical health inadequacies – HFs, HR
- Fund scarcity
- Logistic challenges
- Insecurity and humanitarian crises

Key Takeaways

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- EBOD is not new, transmission can be prevented by adherence to PHSM
- Early detection is key and separation of those exposed or possibly infected is important
- For those sick, early presentation at the treatment facility produces better outcomes
- Communities need to own and lead the response
- Our health systems need to be strengthened
- Our health facilities need to be safe with solid infrastructure and funded
- Government and political leadership is critical.