EBOLA IN CONTEXT: UNDERSTANDING TRANSMISSION, RESPONSE AND CONTROL

# **WEEK** **1** STEP 1.4. MODES OF TRANSMISSION

## Question 1

In what way(s) can an infection be transmitted from one person to another?

## Answer

Select one or more:

1. Direct contact with infected individuals
2. Through the air over larger distances
3. Over short distances (e.g. <1 metre)
4. All of these
5. Through fomites

## Question 2

Given what you know about transmission, in which of these scenarios might the Ebola virus be transmitted? You can select only one answer, so read all the options before answering.

## Answer

Select one or more:

1. Both touching the body of a person who died of Ebola at a funeral and handling bedclothes soiled with vomit or faeces from an Ebola patient
2. Talking to an Ebola patient over a fence in a treatment centre, keeping a distance of 3 metres
3. Handling bedclothes soiled with vomit or faeces from an Ebola patient
4. Touching the body of a person who died of Ebola at a funeral

# Feedback and correct answers

## Question 1

1. Direct contact with infected individuals

Feedback: Direct contact with an infected person via the skin, mucosa, bodily fluids, or vertical transmission such as from a mother to a child are all ways in which an infection can be transmitted. However, this is not the only way. How else might an infection be transmitted?

1. Through the air over larger distances

Feedback: Some infections, such as measles and tuberculosis, can be termed airborne, meaning they are able to travel longer distances as aerosols and still infect someone. However, this is not the only way. How else might an infection be transmitted?

1. Over short distances (e.g. <1 metre)

Feedback: An infection can be transmitted over short distances (less than 1 metre) via droplets, for example when sneezing. However, this is not the only way. How else might an infection be transmitted?

1. **All of these (CORRECT)**

**Feedback: An infection can be transmitted from person-to-person in all of these ways:**

* **actual contact, via the skin, mucosa, bodily fluids, or from a mother to a child**
* **via fomites, or physical objects that carry infection**
* **over short distances (less than 1 metre) via droplets, for example from sneezing**
* **over longer distances, if the virus is capable of being transmitted through aerosols in airborne infections**

**Ebola can be transmitted in all of these ways except over larger distances. It is not capable of aerosol transmission, and is as such not classed as airborne.**

1. Through fomites

Feedback: An infection can be transmitted from person-to-person via fomites, or physical objects or substances capable of carrying infectious organisms. However, this is not the only way. How else might an infection be transmitted?

## Question 2

1. **Both touching the body of a person who died of Ebola at a funeral and handling bedclothes soiled with vomit or faeces from an Ebola patient (CORRECT)**

**Feedback: The Ebola virus could be spread through actual contact if someone were to touch the body of a person who died of Ebola at a funeral. Bedclothes soiled with the bodily fluids of an Ebola patient would be termed fomites, or physical objects that carry infection, meaning that the virus could also be transmitted to someone who handled them.**

1. Talking to an Ebola patient over a fence in a treatment centre, keeping a distance of 3 metres

Feedback: Although the Ebola virus can be transmitted by person-to-person contact, droplets, and fomites, it is not an airborne virus, and could not travel 3 metres.

1. Handling bedclothes soiled with vomit or faeces from an Ebola patient

Feedback: Bedclothes soiled with the bodily fluids of an Ebola patient would be termed fomites, or physical objects that carry infection. As such, the virus could be transmitted to an individual handling the soiled bedclothes. However, this is not the only scenario in which the virus could be transmitted. How else could it happen?

1. Touching the body of a person who died of Ebola at a funeral

Feedback: An individual who dies of Ebola remains infectious after death. The virus could therefore be transmitted through actual contact if someone were to touch the body of a person who died of Ebola at a funeral. However, this is not the only scenario in which the virus could be transmitted. How else could it happen?

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