

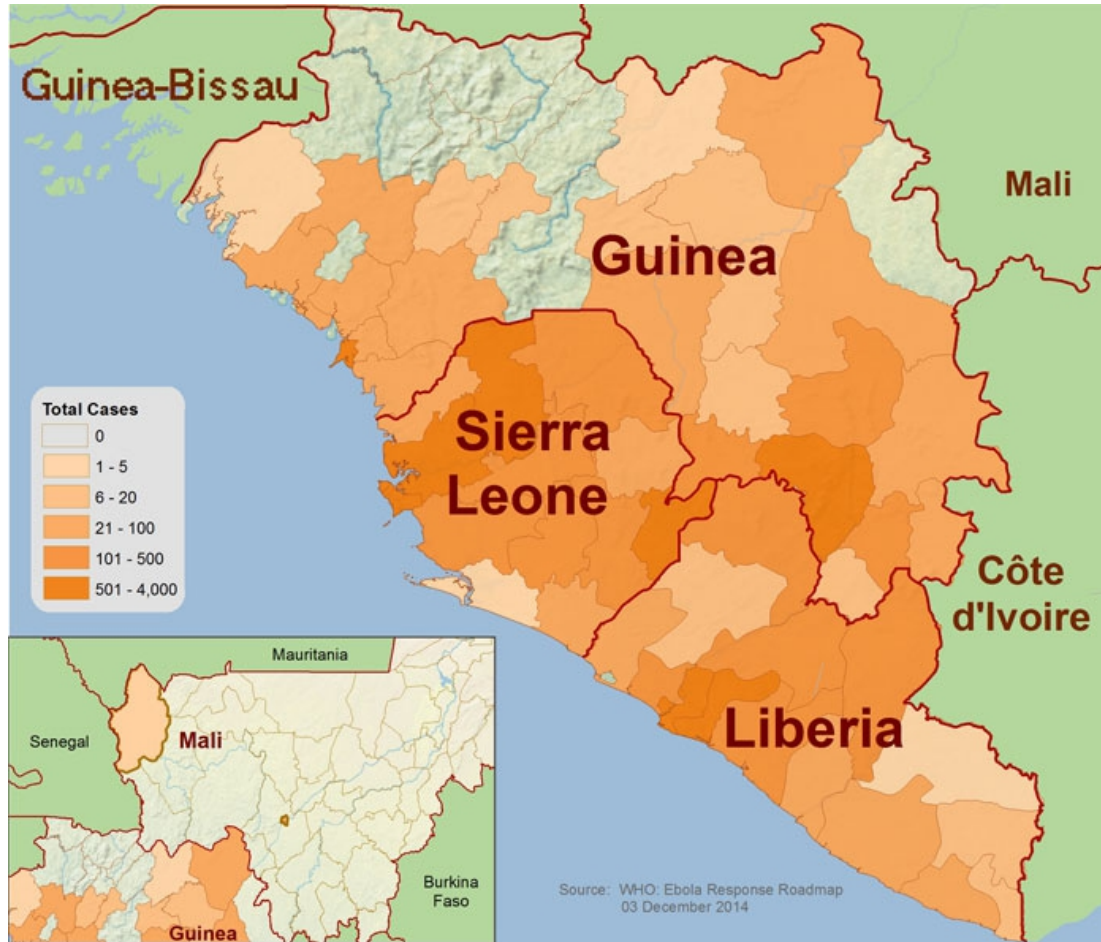
Ebola quiz

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KEEP
CALM
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ONLY A
QUIZ



General knowledge

- **The name Ebola comes from the province where the disease was first discovered.**

- The name Ebola comes from the province where the disease was first discovered.

FALSE

- In 1976, Ebola virus was first identified in Yambuku, 60 miles from the Ebola River (Congo), but Professor Peter Piot decided to name it after the river so that the town would not be associated with the disease's stigma.



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TRUE

Countries with Widespread Transmission

Country	Total Cases	Laboratory-Confirmed Cases	Total Deaths
Guinea	2283	2035	1412
Liberia	7719	2830	3177
Sierra Leone	7798	6317	1742
Total	17800	11182	6331

Countries with an Initial Case or Cases and/or Localized Transmission

Country	Total Cases	Laboratory-Confirmed Cases	Total Deaths
United States	4	4	1
Mali	8	7	6
Total	12	11	7

Previously Affected Countries

Country	Total Cases	Laboratory-Confirmed Cases	Total Deaths
Nigeria*	20	19	8
Senegal*	1	1	0
Spain*	1	1	0
Total	22	21	8

*The outbreaks of Ebola Virus Disease (EVD) in Senegal, Nigeria, and Spain were declared over on October 17, October 19, and December 2, 2014, respectively. A national EVD outbreak is considered to be over when 42 days (double the 21-day incubation period of the Ebola virus) has elapsed since the last patient in isolation became laboratory negative for EVD.

The virus

- **Ebola is a highly contagious disease and can be spread via airborne transmission.**

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FALSE

- Ebola is not easily spread; for example, it does not spread by casual contact and there is no evidence for airborne transmission of Ebola.
- Ebola is spread via contact with blood and other bodily fluids, including saliva, mucous, vomit, feces, sweat, tears, breast milk, urine, and semen, and is highly infectious if the patient is critically ill with a high viral load. This is the rationale for the high degree of precaution, including monitored donning and doffing of personal protective equipment (PPE), when caring for such a patient.

- **One can become infected by a single drop of body fluid from an infected person (e.g. blood or saliva).**

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TRUE

- When dealing with a very sick patient in which the titer of the virus is very high, probably very little volume is needed to become infected.
- Some healthcare workers got infected when they were taking off (doffing) their PPE. Sometimes you get material on the PPE that you might not even notice, and as you doff you brush it against your skin and then maybe touch your nose or your eye.

- **The Ebola RNA virus can survive outside the human body for days.**

- **The Ebola RNA virus can survive outside the human body for days.**

TRUE

- If you have a dry virus on an inanimate object, the length of time it can survive is likely measured in minutes.
- However, if the Ebola virus is in material that's proteinaceous, like blood, diarrhea, or vomit, it can last for a considerable period of time, measured even in days.

Global strategies

- **Quarantine is an essential public health measure to control the spread of Ebola.**

- Quarantine is an essential public health measure to control the spread of Ebola.

FALSE

- Quarantine is a strategy to prevent spread of diseases that may be transmissible prior to the onset of symptoms. Ebola is not transmissible before a person is symptomatic, so there is no scientific basis for restricting the movement of healthy, asymptomatic people who may have been exposed. Immediate isolation is indicated once symptoms develop.

- **The single most important step in Ebola preparedness is early screening for Ebola.**

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TRUE

- Many patients will present with nonspecific flu-like symptoms who are not at risk for Ebola. The most important first step is to *identify* patients with epidemiological risk factors (travel to an Ebola outbreak region or direct contact with a known Ebola patient within the prior 21 days).
 - For patients without these risk factors, triage can proceed as usual.
 - For those with risk factors and symptoms, immediate *isolation* and donning of PPE is indicated before any further contact or evaluation.
- Initial signs and symptoms of Ebola can be nonspecific and may include fever, myalgia, and malaise. Gastrointestinal symptoms develop later and manifest as severe watery diarrhea, nausea, vomiting, and abdominal pain. Up to 18% of patients in the current outbreak have developed hemorrhage, most often blood in the stool.

- **Restricting travel from Ebola-outbreak countries is the best way to prevent the spread of Ebola.**

- **Restricting travel from Ebola-outbreak countries is the best way to prevent the spread of Ebola. FALSE**
- There is no evidence that restricting travel will prevent spread of Ebola. Exposed and infected persons might reach a country undetected and thereby escape essential public health monitoring, which could worsen transmission risk. The key to controlling this epidemic is to stop Ebola at its source in West Africa.

- **When exit screening is conducted, entry screening is likely to have added value in detecting Ebola cases.**

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TRUE

- All three affected countries (Guinea, Liberia and Sierra Leone) have implemented exit screening measures.
- Of 36.000 travellers screened, 77 were positive but no Ebola was confirmed.
- Theoretically entry screening may pick up people having become symptomatic during long haul flights (over 12 hours).
- Entry screening is likely to detect even less cases, but at a very high cost.
- Even the best temperature screening method misses 20% of febrile cases.
- Most infected cases will still be afebrile at entry screening.
- Travellers may conceal their fever.

Ebola screening starts at Zaventem



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The screening of passengers arriving on flights from the countries that have been affected by the outbreak of ebola in West Africa has started at Zaventem Airport, near Brussels. Early on Monday morning passengers arriving on a flight from Guinea and Sierra Leone had their temperatures checked before they were allowed to go through passport control and customs.

The patient

- **Ebola is not contagious until a person is symptomatic.**

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TRUE

- Ebola is not contagious prior to symptom onset. Symptoms may be very subtle in the early stages of disease when viral loads are low.

- **The average incubation period for Ebola is 3 weeks.**

- **The average incubation period for Ebola is 3 weeks.**
FALSE
- While nearly all patients will become symptomatic from 2 to 21 days after exposure to Ebola, the average time from exposure to symptoms is 8 to 10 days.

- **A patient presenting with fever and travel to West Africa within the past 21 days is more likely to have malaria than Ebola.**

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TRUE

- Malaria is much more common than Ebola. However, a positive malaria test does not rule out Ebola, as malaria is extremely prevalent in this population and the diseases could coexist.

- **A patient presenting with symptoms of Ebola and travel to Liberia within the past 21 days can be safely removed from isolation after a negative serum test.**

- **A patient presenting with symptoms of Ebola and travel to Liberia within the past 21 days can be safely removed from isolation after a negative serum test.**

FALSE

- Many hospitals send serum samples to regional laboratories for testing. Results must be confirmed by the reference laboratory. An initially negative reverse transcription polymerase chain reaction (RT-PCR) test result for Ebola virus does not rule out Ebola virus infection. If an initial test is negative in a person under investigation for Ebola, repeat testing is indicated in 72 hours.

- **Patients with proven Ebola need to be isolated in a negative pressure room.**

- **Patients with proven Ebola need to be isolated in a negative pressure room.
FALSE**
- Since transmission is not airborne, a negative pressure room is not essentially required. Patients can be treated in a standard room.

- **Ebola patients may present with profound hypovolemia and arrhythmias secondary to hypokalemia.**

- **Ebola patients may present with profound hypovolemia and arrhythmias secondary to hypokalemia.**

TRUE

- Ebola patients are subject to large volume loss due to copious watery (and sometime bloody) diarrhea (such as that seen with cholera) and profuse vomiting.
- Profound dehydration and hypokalemia can result. Life-threatening arrhythmias due to electrolyte abnormalities have been reported.

- **Cardiopulmonary resuscitation is indicated for Ebola patients in cardiac arrest.**

- **Cardiopulmonary resuscitation is indicated for Ebola patients in cardiac arrest.**
FALSE
- Prevailing expert opinion is that if a patient has loss of cardiac output due to multisystem organ failure from septic shock in the setting of Ebola, resuscitative efforts would be futile and also extremely risky for the clinicians performing the procedures.
- Some Ebola centers have requested that patients sign a do-not-resuscitate (DNR) order.
- The efficacy of other invasive procedures such as intubation and dialysis are still being debated, with anecdotal reports arising in the Western world of good outcomes after their application.

Personal Protective Equipment (PPE)

- **In the context of Ebola, “donning” and “doffing” means “putting on” and “removing” personal protective equipment (PPE).**

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TRUE

- **Doffing of personal protective equipment (PPE) is more difficult than donning.**

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TRUE

- Doffing is more difficult than donning because the PPE may be contaminated with blood and bodily fluids from the Ebola patient at that point, and even a small exposure can lead to transmission of the disease.
- There is no room for error when removing PPE.

- **It is recommended for a trained observer to supervise PPE donning/doffing to ensure proper protocols are followed.**

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- **TRUE**

- **When donning the gown, it should be tight fitting to prevent free movement and potential contamination.**

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TRUE



- **PPE should be removed quickly (doffing) in order to minimize extended exposure to self or others.**

- **PPE should be removed quickly (doffing) in order to minimize extended exposure to self or others.**
- **FALSE**
- **Doffing is the most risky procedure during treatment of Ebola patients and should be conducted with utmost care and control.**

- Vraag over behandeling van patienten met Ebola?
- Vraag ivm 3 screening questions?