



# ePROTECT 2018

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Pre-deployment course for WHO personnel  
responding to Ebola virus disease  
outbreaks

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# Introduction

- This learning course is intended to provide the most basic information needed to deploy safely during a response to an Ebola virus disease (EVD) outbreak.
- All deployees, however experienced, are advised to read and reflect on the course materials and other sources of information that are provided here.
- Depending on your role and assignment in the response, you may be required to take further self-learning or face-to-face trainings.
- The information herewith is provided in good faith based on the latest technical and operational guidance available at the time of publication. Updated trainings and briefings will be made available as new information becomes available.
- For more information on training and learning related to Ebola response and readiness, contact: [outbreak.training@who.int](mailto:outbreak.training@who.int)



# Learning objectives

By the end of this learning course, you will be able to:

1. Describe the signs, symptoms and transmission of Ebola disease and list preventive and control measures
2. Use appropriate infection prevention and control precautions to protect yourself against Ebola virus and remain healthy during your mission
3. Protect your health before, during and after deployment
4. Describe the procedure to follow in case of sickness (related to Ebola virus or not) or/and accidental exposure to Ebola virus, and list the principles of medical evacuation and follow-up care
5. Recognize and manage stress





# What you need to know about Ebola virus disease

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## Module 1

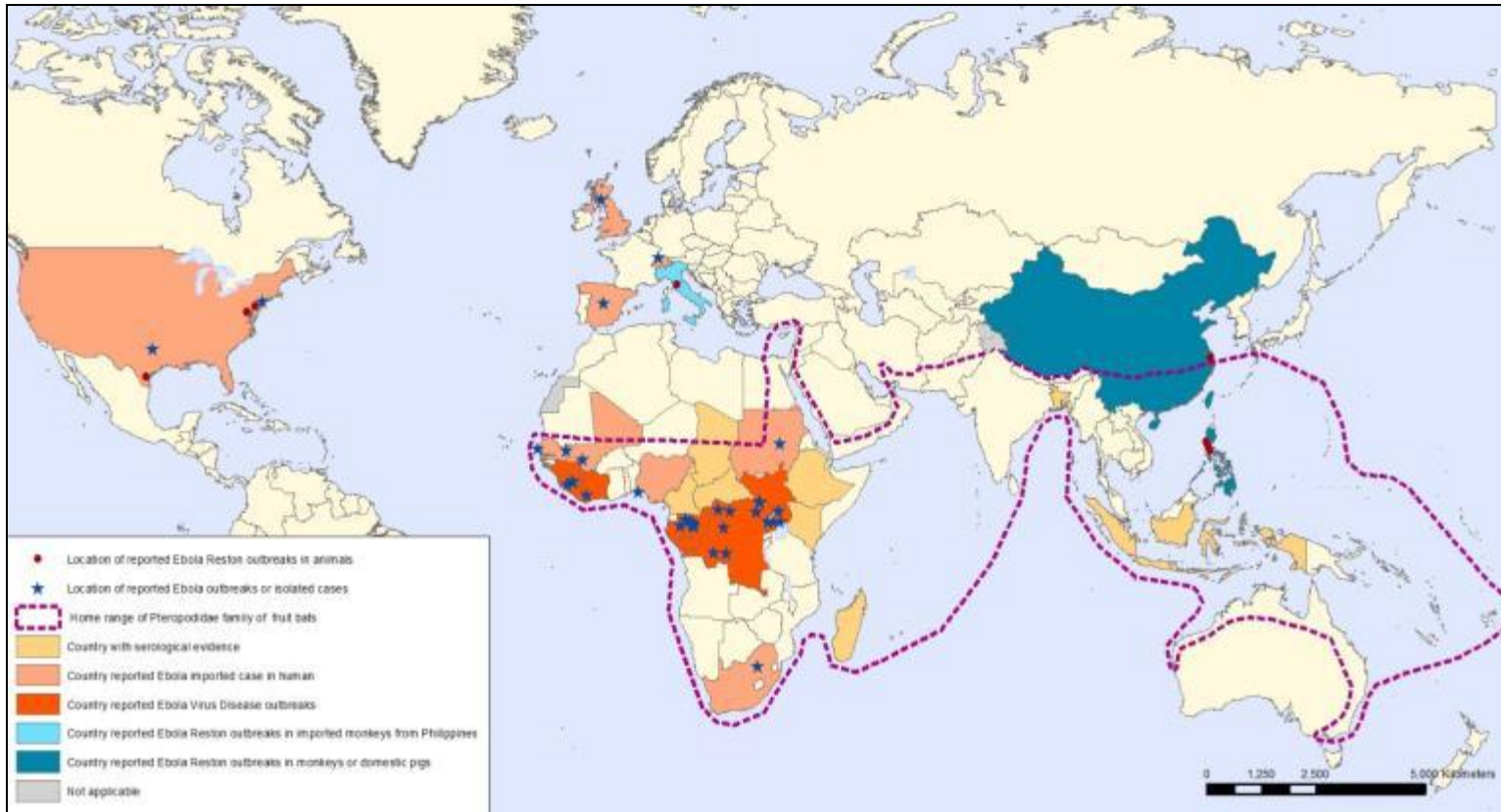
# Ebola virus disease (EVD)

- The virus is initially transmitted to people from wild animals and then spreads in the human population through human-to-human transmission.
- Ebola disease is a severe, often fatal illness in humans.
  - On average, 1 in 2 people infected with Ebola dies (50% case fatality rate).
  - Early supportive care with rehydration, symptomatic treatment improves survival.
- Five species of Ebola virus have been identified. Among them, Bundibugyo ebolavirus, Zaïre ebolavirus and Sudan ebolavirus have been associated with large outbreaks in Africa.





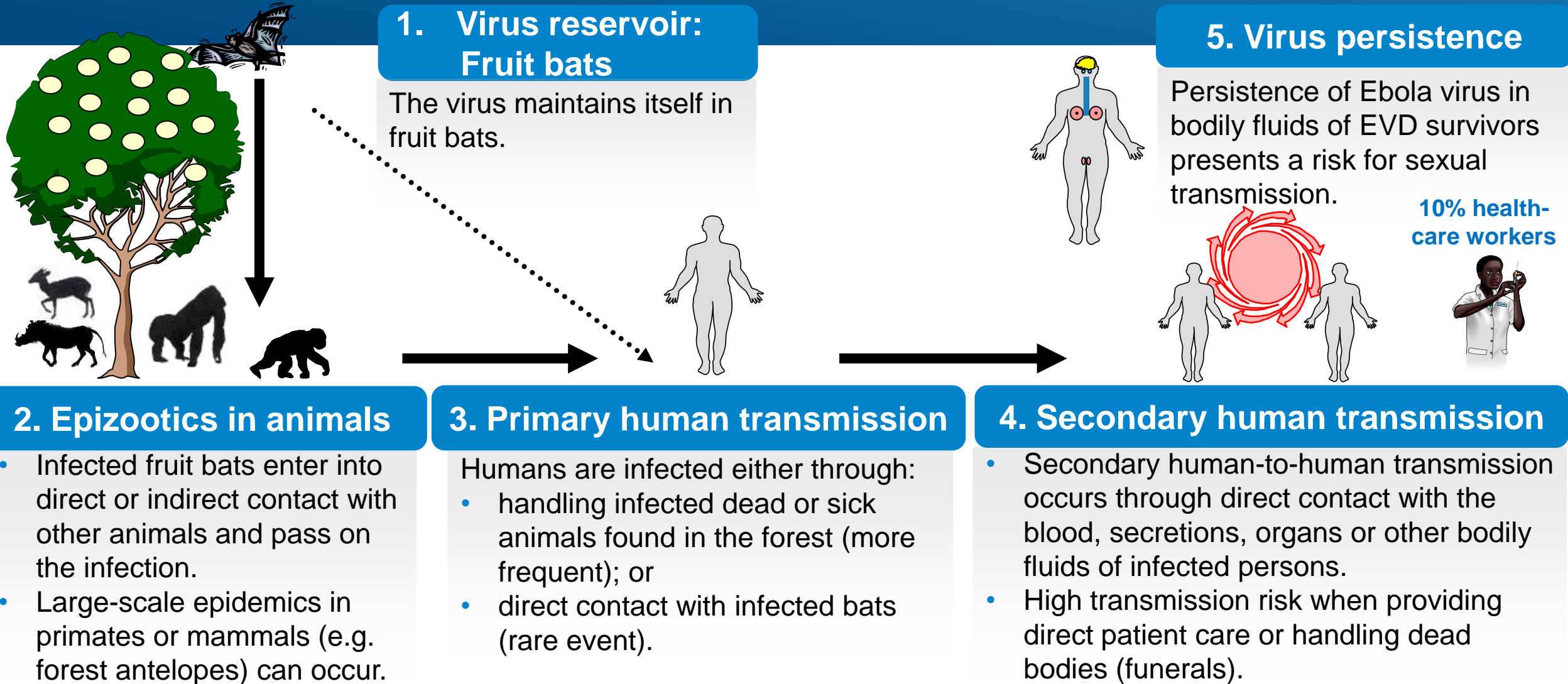
# Geographic distribution of Ebola



- Ebola disease was identified in 2 simultaneous outbreaks in 1976, one in South Sudan and one in the Democratic Republic of the Congo.
- Since 1976, 25 Ebola outbreaks occurred, mostly in central Africa.
- The 2014–2016 Ebola outbreak in West Africa was the largest and most complex.

Map available at: [http://www.who.int/csr/disease/ebola/global\\_ebolaoutbreakrisk\\_20150316.png?ua=1](http://www.who.int/csr/disease/ebola/global_ebolaoutbreakrisk_20150316.png?ua=1)

# Transmission of Ebola virus





# Clinical features of Ebola virus disease

- The incubation period is 2–21 days.
- Humans are not infectious until they develop symptoms.
- Initial symptoms are sudden onset of fever and fatigue, muscle pain, headache and sore throat.
  - Can look like other febrile illnesses, e.g. malaria
- Usually followed by: vomiting, diarrhoea, rash, impaired kidney and liver function, spontaneous bleeding internally and externally (in some cases).

## FACTS TO KNOW ABOUT EBOLA



### SYMPTOMS



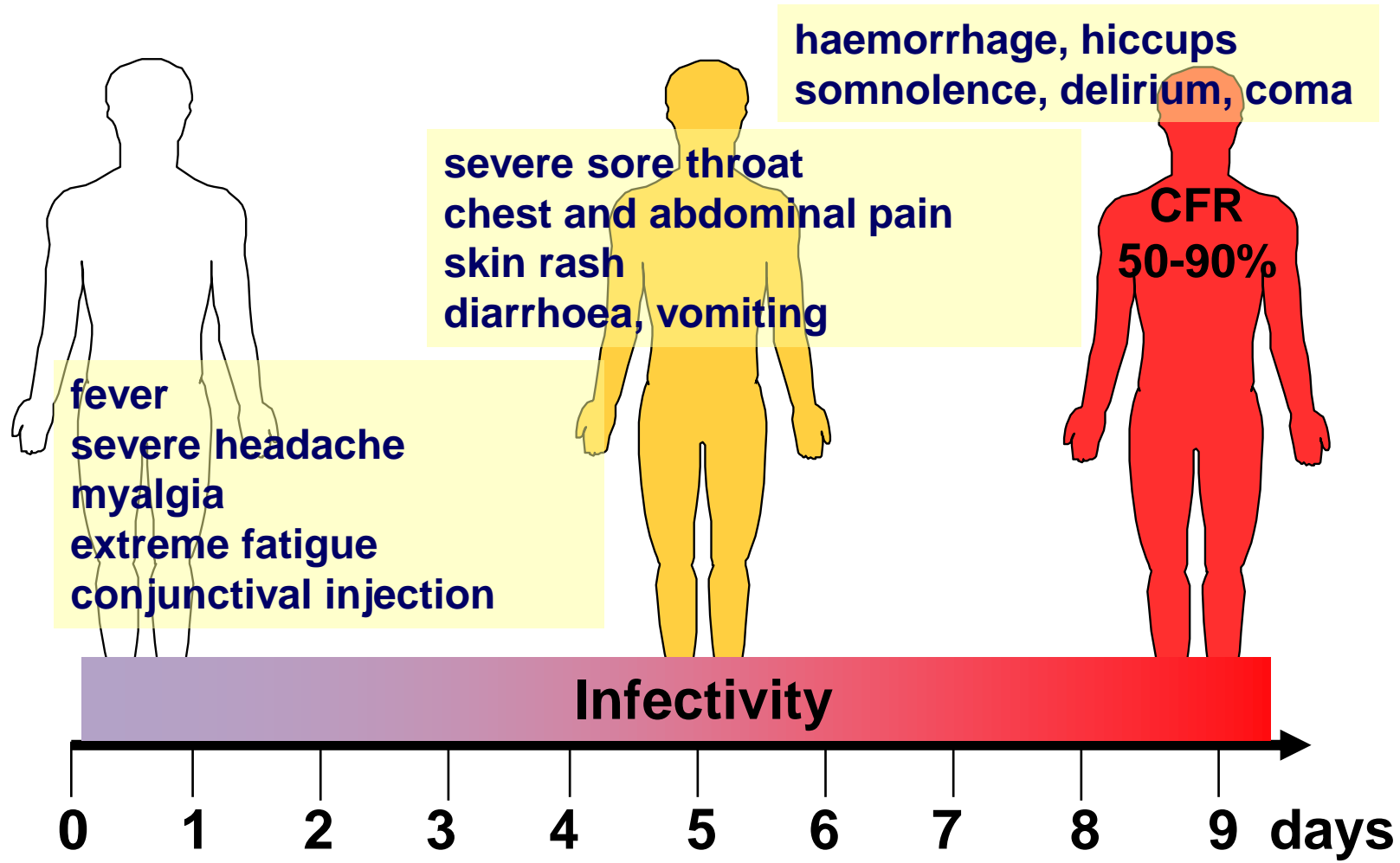
Fever, weakness, muscle pain, headache and sore throat, followed by vomiting, diarrhoea, and bleeding



38°C  
100.4°F



# EVD: Clinical symptoms



# How is EVD transmitted? (1)

- The virus spreads from person to person through:
  - Direct contact (through broken skin or mucous membranes) with the blood, secretions, organs or other bodily fluids of infected people. Among infected bodily fluids, the most infectious are blood, faeces and vomit.
  - Contact with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids.
- Transmission can occur through needlestick injuries when managing a sick patient or a clinical specimen.





# How is EVD transmitted? (2)

EVD is not spread through casual contact (see previous slide).

The risk of infection with Ebola virus is minimal if you have not been in close contact with the bodily fluids of someone sick with or deceased from EVD.

*contact with  
bodily fluids*



# How is EVD transmitted? (3)



WHO /A.Bhatiasevi

People are not infectious until they develop symptoms.

- The virus multiplies within the body before symptoms develop.
- Individuals become contagious when symptoms appear.

# Ebola disease diagnosis

- Symptoms are non-specific; clinical diagnosis may be difficult.
- Differential diagnosis includes other viral haemorrhagic fevers, yellow fever, malaria, typhoid fever, shigellosis, and other viral and bacterial diseases.
- Patient history is essential and should include:
  - Contact with a dead or sick animal
  - Contact with a suspected, probable or confirmed Ebola patient

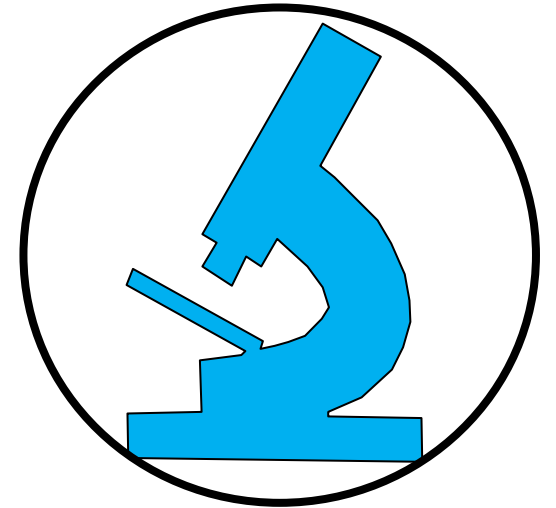




# Ebola disease laboratory diagnosis

Tests for Ebola:

- RT-PCR for **definitive diagnosis in acute disease**
- IgG and IgM ELISA for **retrospective diagnosis in recovering patients**
- Rapid antigen detection tests: **screening tests for acute disease (requires confirmation)**



The list of diagnostics approved for Emergency Use Assessment and Listing procedure (EUAL) by WHO is available here:

[http://www.who.int/medicines/ebola-treatment/emp\\_ebola\\_diagnostics/en/](http://www.who.int/medicines/ebola-treatment/emp_ebola_diagnostics/en/)

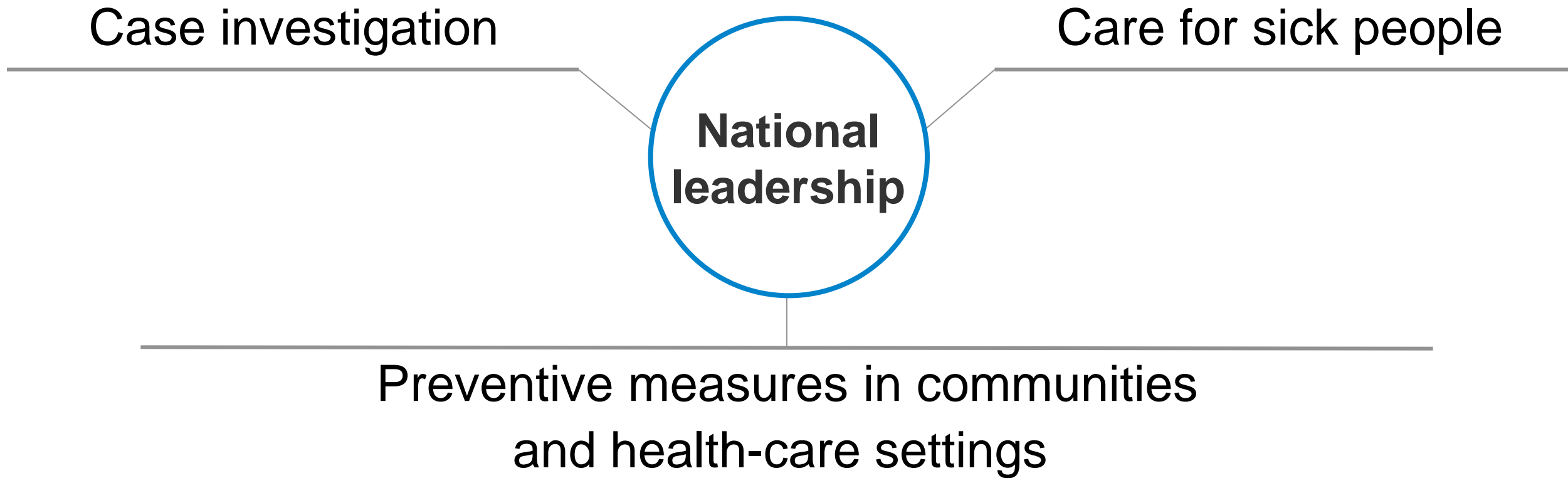
Handling and processing specimens requires **suitably equipped laboratories under maximum biological containment conditions** and staff collecting samples should be **trained**.

# Ebola disease treatment



- Early, aggressive, intensive care support: Monitor fluid and electrolyte balance and renal function, blood pressure, oxygenation, careful rehydration
- Supportive drug therapy including: painkillers, antiemetic for vomiting, anxiolytic for agitation, +/-antibiotics and/or antimalarial drugs
- Psychosocial support and services

# Key components of Ebola disease control





# General strategy to control EVD outbreaks

- Conduct social and cultural assessments
- Engage with key influencers: women and/or youth associations, traditional healers, local authorities, religious and opinion leaders
- Formal and informal communication
- Address community concerns

## Behavioural and social interventions

Psychosocial support

## Clinical case management

- Triage in/out
- Barrier nursing
- Infection control
- Organize funerals
- Clinical trials
- Ethics committee

Media

## Coordination

Ethical aspects

## Expanded access of Ebola Vaccine Implementation Team

- Security, police
- Lodging, food
- Social and epidemiological mobile teams
- Finances, salaries
- Transport vehicles

## Logistics

Control of vectors and reservoirs in nature

## Epidemiological investigation, surveillance and laboratory

- Active case-finding
- Follow-up of contacts
- Specimens
- Laboratory testing
- Database analysis
- Search for the source

# Community engagement and awareness

- Engage with communities to promote desired health practices and behaviours, particularly on caring for sick and/or deceased persons.
- Provide accurate and timely health advice and information about the disease.



# Reducing wildlife-to-human transmission

- Reducing the risk of wildlife-to-human transmission from contact with infected fruit bats or monkeys/apes and the consumption of their raw meat.
  - Animals should be handled with gloves and other appropriate protective clothing.
  - Animal products (blood and meat) should be thoroughly cooked before consumption.





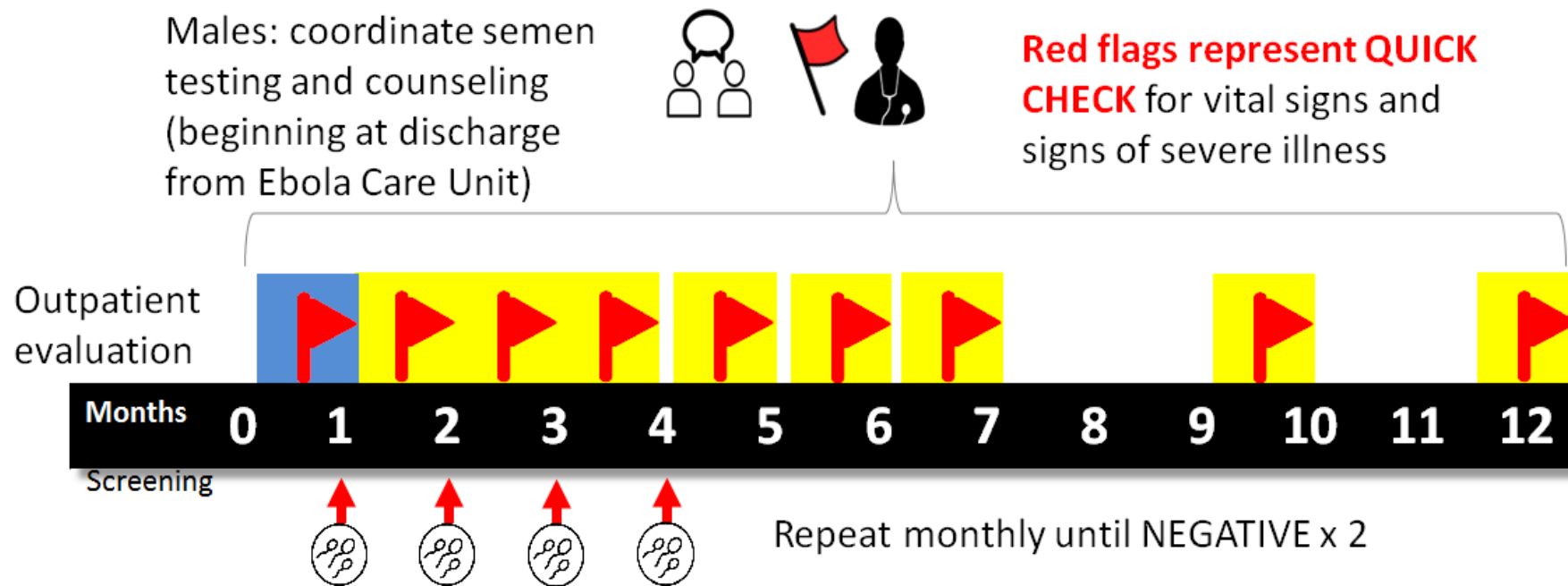
# Reducing human-to-human transmission

- Reducing the risk of human-to-human transmission from direct or close contact with people with Ebola symptoms, particularly with their bodily fluids.
  - Gloves and appropriate personal protective equipment should be worn when taking care of ill patients at home.
  - Regular handwashing is required after visiting patients in a hospital, as well as after taking care of patients at home.
  - Organize safe and dignified burials for people who may have died of Ebola virus disease.



# Reducing possible sexual transmission

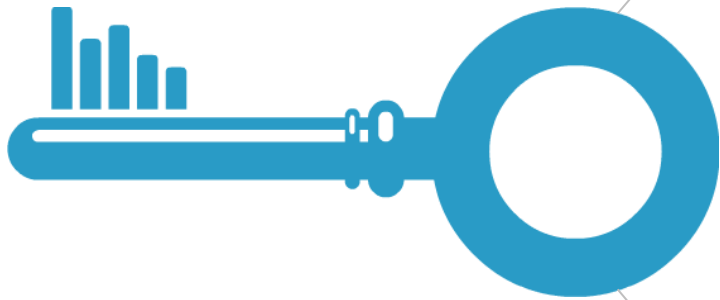
- **Reducing the risk of possible sexual transmission:** WHO recommends that male survivors of Ebola virus disease practice safer sex and hygiene for 12 months from onset of symptoms (if no semen testing can be done) or until their semen tests negative twice for Ebola virus starting 3 months after onset of disease.



# Controlling infection in health-care settings

- Implement standard precautions with all patients – regardless of their diagnosis – in all work practices at all times, including safe injection practices. <http://www.who.int/csr/resources/publications/standardprecautions/en/index.html>
- Health-care workers treating patients with Ebola virus disease should apply extra infection control measures to prevent contact with the patients' blood and bodily fluids and contaminated surfaces or materials, such as clothing and bedding. [http://www.who.int/csr/resources/publications/ebola/filovirus\\_infection\\_control/en/?ua=1](http://www.who.int/csr/resources/publications/ebola/filovirus_infection_control/en/?ua=1)
- Laboratory workers are also at risk. Samples taken from suspected Ebola virus disease cases for diagnosis should be handled by trained staff and processed in suitably equipped laboratories.

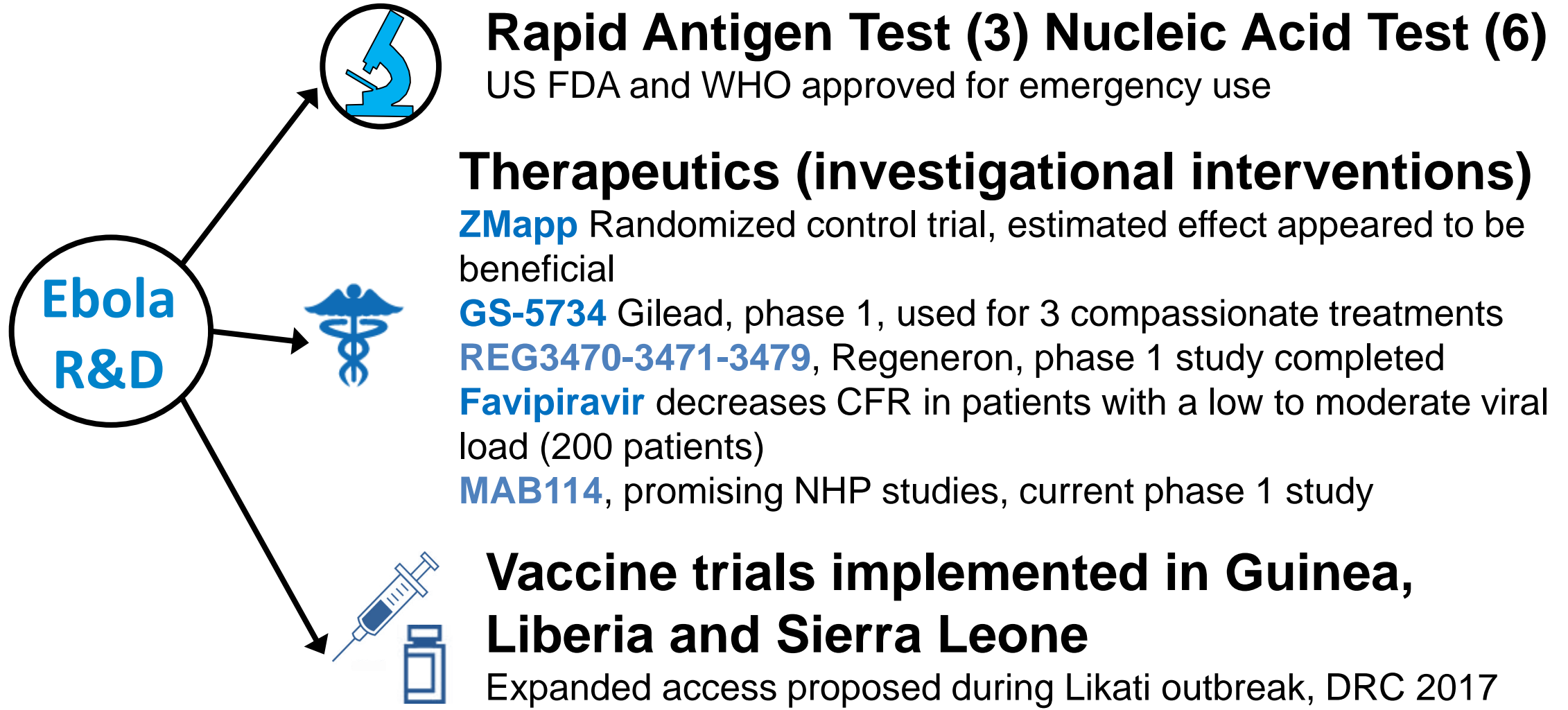
# Key challenges for Ebola virus disease



- Difficult to diagnose patients based on clinical presentation
- Stopping all chains of transmission
- Timely engagement with communities



# Ebola research and development



# WHO information on Ebola virus disease

中文 English Français Русский Español عربي

<http://www.who.int/ebola/en/>

- Technical information
- Fact sheet
- Disease outbreak news
- Infographics
- Maps
- Related links

## Ebola virus disease

### WHO supports Ebola vaccination of high risk populations in the Democratic Republic of the Congo

21 May 2018 - The Ministry of Health with WHO, Médecins Sans Frontières (MSF), UNICEF and other key partners are implementing a ring vaccination with the yet to be licensed rVSV-ZEBOV Ebola vaccine, whereby the contacts of confirmed cases and the contacts of contacts are offered vaccination. Frontline healthcare workers and other persons with potential exposure to EVD – including but not limited to laboratory workers, surveillance teams and people responsible for safe and dignified burials – will also receive the vaccine.

[Read the press release](#)

[Learn more about ring vaccination \(video\)](#)



**Latest numbers from DRC**  
35 confirmed cases, 13 probable cases, 3 suspected cases. Total cases: 51 (including 25 deaths) have been reported from DRC as of 28 May 2018.



**Fact sheet**  
General information on Ebola virus disease, controlling the infection, WHO response



**Frequently asked questions**  
Answers to questions on the disease, transmission of the virus, treatment

## Current situation: DRC 2018

Strategic response plan  
29 May 2018

Ebola outbreak response  
Presentation by Dr Peter Salama, 23 May 2018  
FAQ: Compassionate use of investigational vaccine for the Ebola outbreak in DRC

## Technical guidance

— Key technical documents on Ebola

### Ebola guidance by topic

Strategy and coordination  
Surveillance, contact tracing, laboratory

## News and updates

This section contains all news and press releases on the currently ongoing outbreaks, past outbreaks as well as general updates on Ebola virus disease and WHO's action.

WHO supports Ebola vaccination of high risk

# Key contact



- Dr Pierre Formenty

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Infectious Hazard Management  
Health Emergencies Programme  
WHO Geneva

[formentyp@who.int](mailto:formentyp@who.int)





# What you need to know about infection prevention and control

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## Module 2



# Infection prevention and control (IPC)



Infection prevention and control measures aim to ensure the protection of those who might be vulnerable to acquiring an infection, both in the general community and while receiving care due to health problems, in a range of settings.

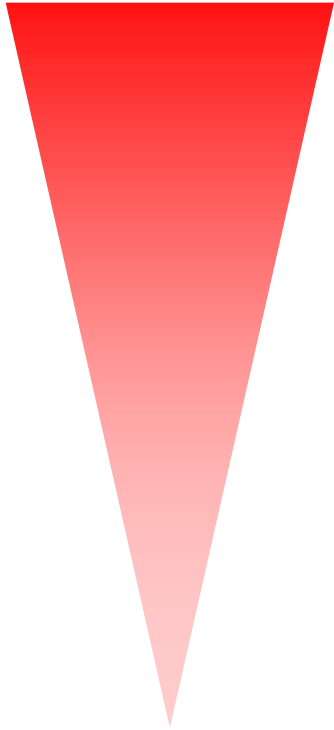
# Different settings

- Health-care settings:
  - Health care can be at home, in community centres, hospitals, etc.
  - Primary source = patient
- Non-health-care settings:
  - Community settings
  - Primary source = sick person



WHO /C.Black

# Infection control strategies



- Source control/reduction/elimination
- Administrative controls
- Environmental and engineering controls
- Personal protective equipment (PPE)

# What is your risk?

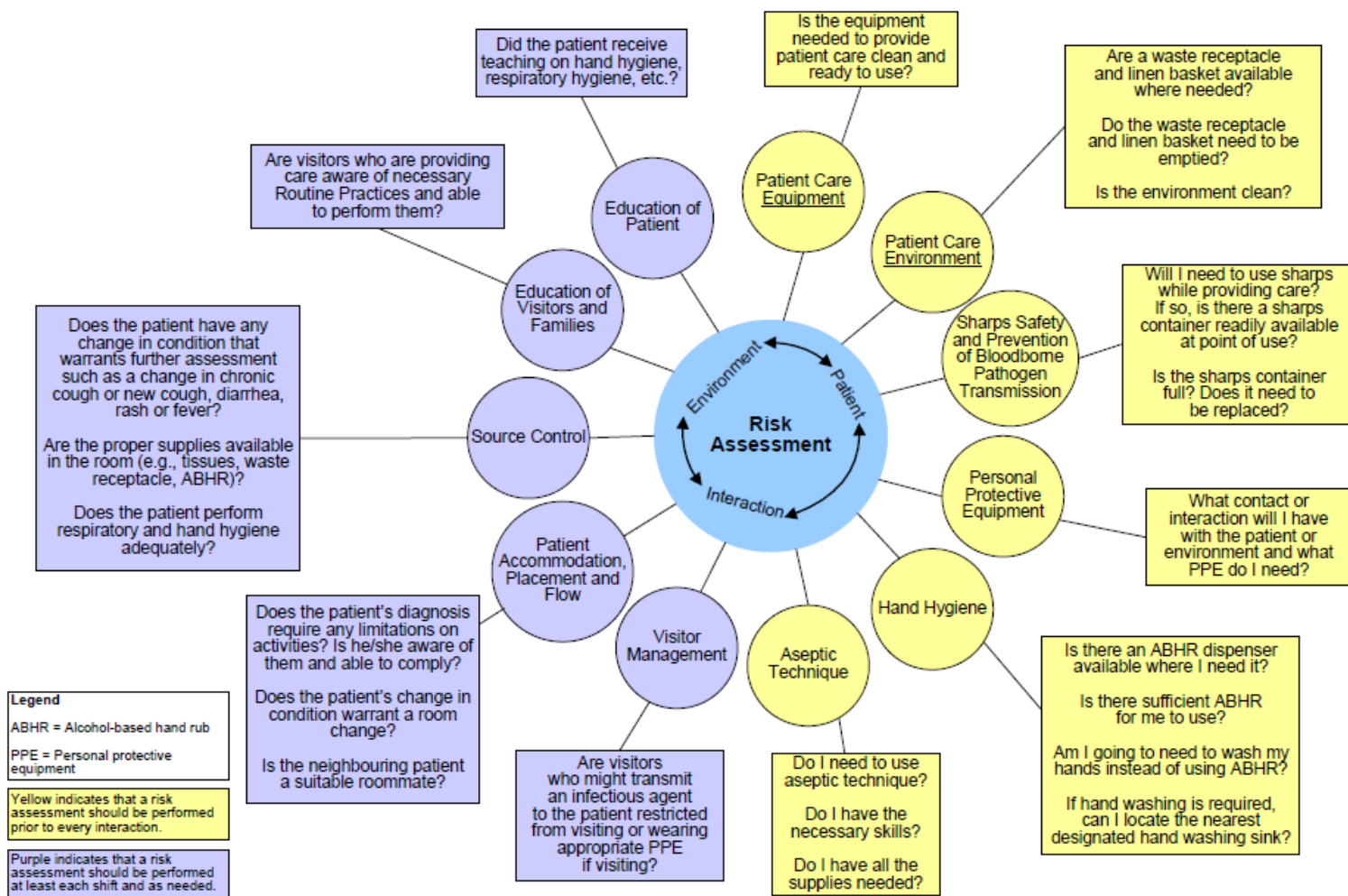
Risk = hazard x  
likelihood

What is your likelihood  
of being in direct  
contact with the bodily  
fluids of a person sick  
or dead from EVD?

RISK ASSESSMENT MATRIX				
SEVERITY PROBABILITY	Catastrophic (1)	Critical (2)	Marginal (3)	Negligible (4)
Frequent (A)	High	High	Serious	Medium
Probable (B)	High	High	Serious	Medium
Occasional (C)	High	Serious	Medium	Low
Remote (D)	Serious	Medium	Medium	Low
Improbable (E)	Medium	Medium	Medium	Low
Eliminated (F)	Eliminated			



# Elements of routine practices summary



# Standard precautions: Key elements

- Hand hygiene
- Appropriate personal protective equipment (PPE) based on risk assessment at the point of care
- Respiratory hygiene
- Prevention of injuries from needles and other sharp instruments
- Safe waste disposal
- Environmental cleaning and disinfection
- Safe handling of contaminated linens
- Cleaning and disinfection of patient care equipment

# Standard precautions

- To limit/prevent contact with all secretions or biological fluids, skin lesions, mucous membranes, and blood or bodily fluids.
  - Includes direct or indirect contact
  - Dealing with individuals
  - Dealing with the environment
- Main foundations
  - Clean/safe environment
  - Hand hygiene
  - Use of PPE based on risk assessment



WHO /J.Anoko



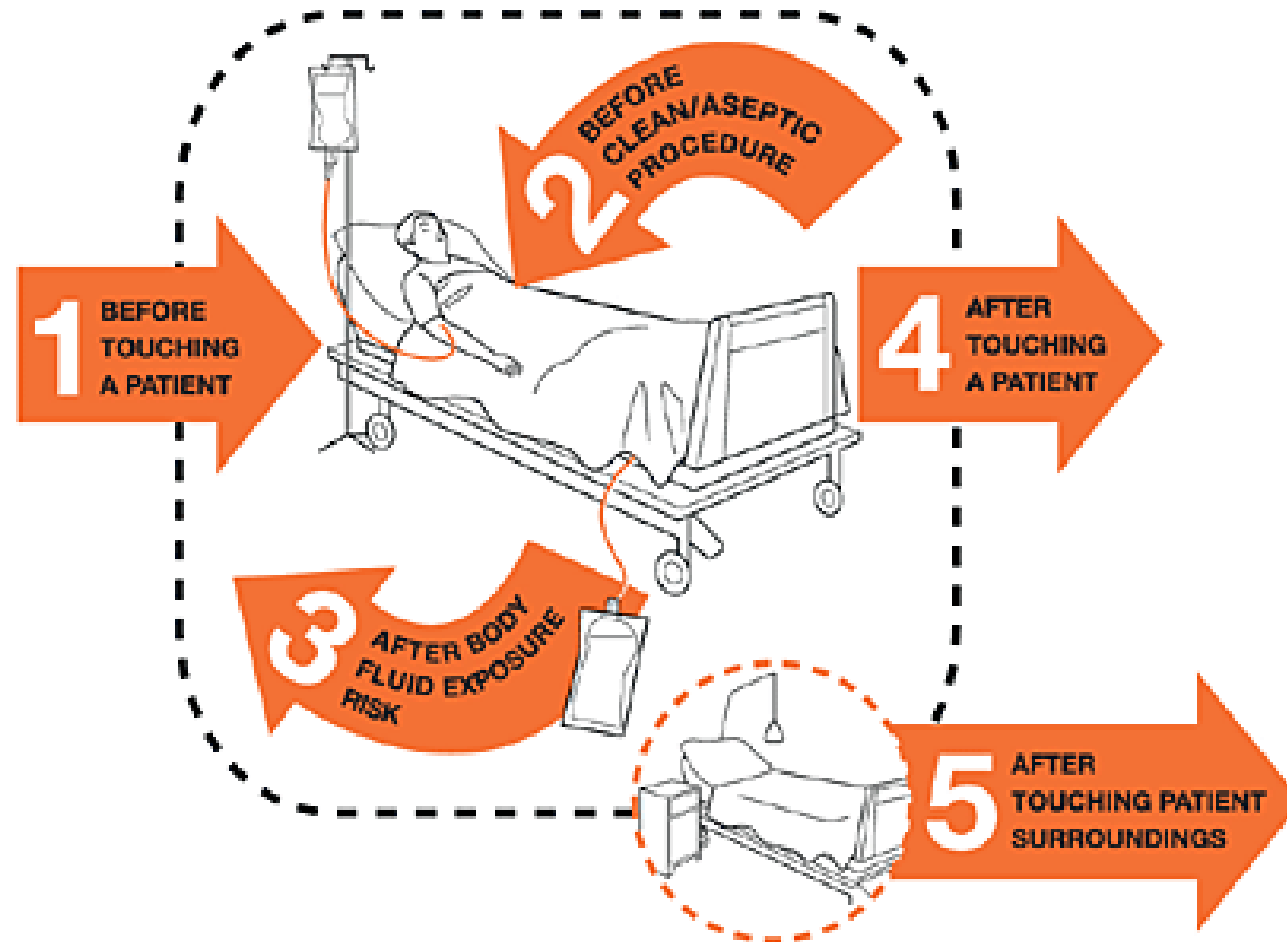
WHO /A.Bhatiasevi



# Use of personal protective equipment (PPE) based on risk assessment

SCENARIO	HAND HYGIENE	GLOVES	GOWN	MEDICAL MASK	EYEWEAR
Always before and after patient contact, and after contaminated environment	✓				
If direct contact with blood and body fluids, secretions, excretions, mucous membranes, non-intact skin	✓	✓			
If there is risk of splashes onto the health care worker's body	✓	✓	✓		
If there is a risk of splashes onto the body and face	✓	✓	✓	✓	✓

# “My 5 Moments for Hand Hygiene” approach



<http://www.who.int/gpsc/5may/background/5moments/en/>

# How to handrub and handwash



WHO /U.Zhao

## How to handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS ONLY WHEN VISIBLY SOILED!

Duration of the entire procedure: 20-30 sec.



## How to handwash?

WASH HANDS ONLY WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB!

Duration of the entire procedure: 40-60 sec.

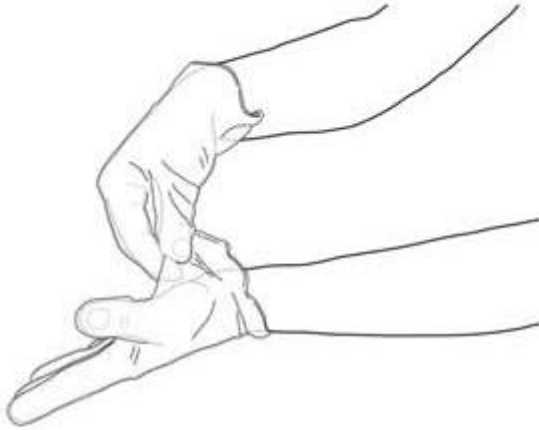


<http://www.who.int/gpsc/5may/background/5moments/en/>

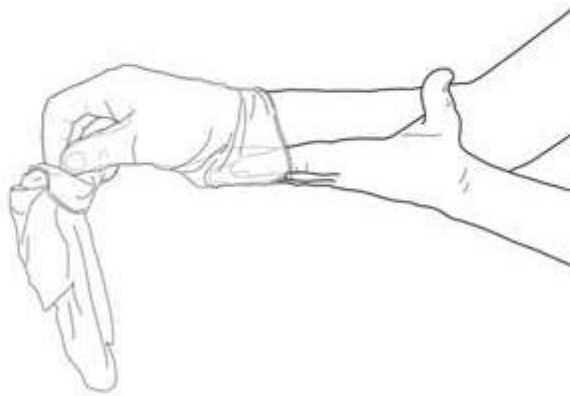
# Gloves: How to remove them

(Before putting on gloves: Hand hygiene and no jewellery)

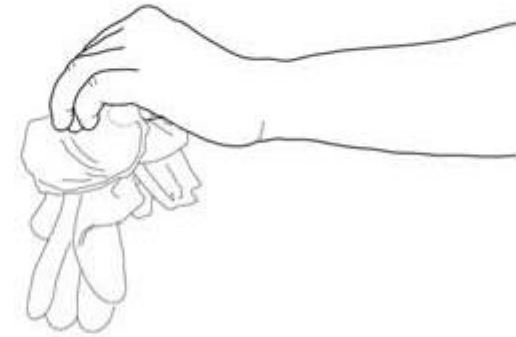
## II. HOW TO REMOVE GLOVES:



1. Pinch one glove at the wrist level to remove it, without touching the skin of the forearm, and peel away from the hand, thus allowing the glove to turn inside out



2. Hold the removed glove in the gloved hand and slide the fingers of the ungloved hand inside between the glove and the wrist. Remove the second glove by rolling it down the hand and fold into the first glove



3. Discard the removed gloves

4. Then, perform hand hygiene by rubbing with an alcohol-based handrub or by washing with soap and water



# How to protect yourself in community settings

- Keep your hands clean. Perform hand hygiene:
  - **Before, during** and **after** preparing food
  - **Before** eating food
  - **After** using the toilet
  - **After** contact with a sick person
    - **Before** and **after** caring for someone who is sick
  - **After** blowing your nose, coughing or sneezing
  - **After** touching an animal, animal feed or animal waste
  - **After** touching garbage
  - **After** touching frequently touched surfaces



WHO /S.Oka

**When in doubt:** Avoid touching your face before performing hand hygiene

# Personal protective equipment (PPE)

Depending on what activities you will undertake in the field, appropriate PPE should be utilized.

- These differ between clinical care, mortuary care, environmental and linen management, etc.
- Includes combinations of gowns, aprons, gloves, boots, masks and eye protection.



WHO /A.Bhatiasevi

# Outbreak pendulum

Low compliance  
Low risk perception  
Lack of knowledge



WHO /A.Esiebo

Confident  
application  
of  
appropriate  
IPC  
measures

Excessive measures  
High risk perception  
Fear, anxiety  
Lack of knowledge



Lack of  
resources  
Insufficient  
infrastructure

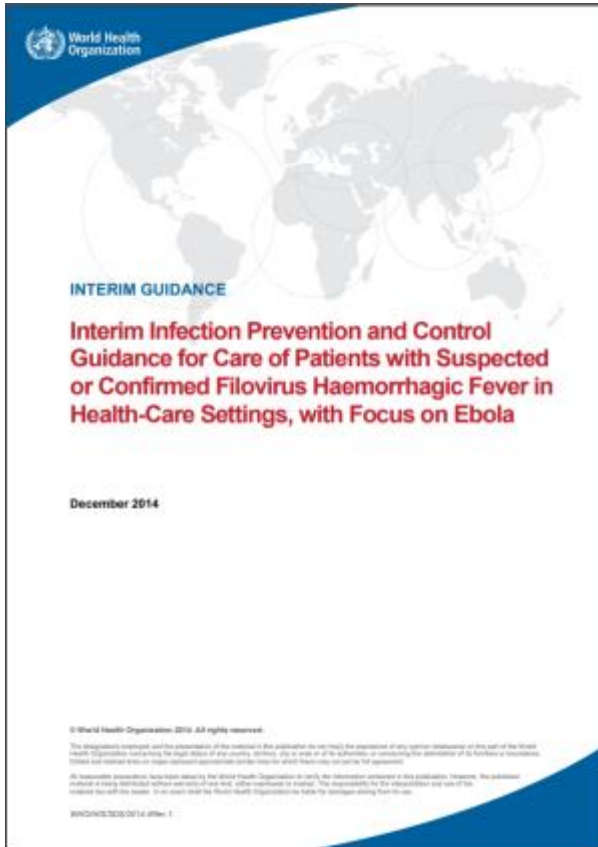
WHO /W.Romeril

# How to protect yourself in community settings

- If the task you are supposed to perform involves a possibility of physical contact with a person who may be infected with EVD:
  - Do not do it if you are not properly trained in IPC, including use of PPE and other IPC precautions
  - Consult your coordinator and/or IPC professional
- If your mission Terms of Reference include working with Ebola patients, visiting health-care facilities, working with burial teams or any other work involving exposure to Ebola patients, **you need to receive specialized training**



# IPC and PPE guidance



## Interim Infection Prevention and Control Guidance for Care of Patients with Suspected or Confirmed Filovirus Haemorrhagic Fever in Health-Care Settings, with Focus on Ebola

December 2014

[http://apps.who.int/iris/bitstream/handle/10665/130596/WHO\\_HIS\\_SDS\\_2014.4\\_eng.pdf;jsessionid=FEC439DE93843A82BBFF649D739BE67C?sequence=1](http://apps.who.int/iris/bitstream/handle/10665/130596/WHO_HIS_SDS_2014.4_eng.pdf;jsessionid=FEC439DE93843A82BBFF649D739BE67C?sequence=1)



## Personal protective equipment for use in a filovirus disease outbreak

November 2016

<http://www.who.int/csr/resources/publications/ebola/personal-protective-equipment/en/>

# Key contact



- Dr Janet Diaz

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Infectious Hazard Management  
Health Emergencies Programme  
WHO Geneva  
[diazj@who.int](mailto:diazj@who.int)



# Seeing your health as **YOUR** priority: Before, during and after deployment

## Module 3



World Health  
Organization

HEALTH  
**EMERGENCIES**  
programme

# WHO medical clearance

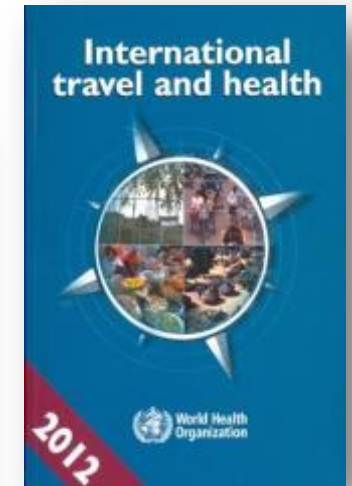
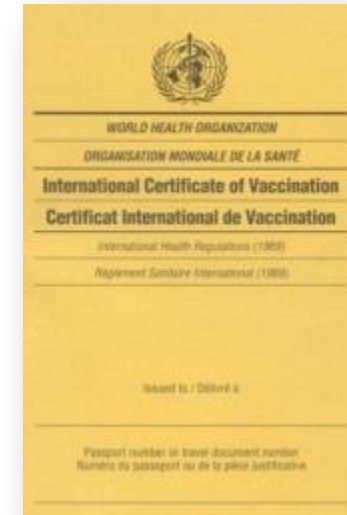
- Fit to work and to travel – Medical clearance for travel will be provided based on:
  - date of the last medical examination
  - individual medical/health status
  - sick leave status or current health issues
  - vaccinations and malaria prophylaxis, and
  - mandatory pre-debriefing consultation with nurses at Staff Health and Wellbeing Services (SHW).
- Address any health concerns you may have with your private doctor/SHW physician BEFORE deployment, e.g. prescription for glasses, usual drugs, check-up with dentist, gynaecologist, etc.





# Mandatory/strongly recommended vaccinations

- Yellow fever a must
- Diphtheria-tetanus-polio (pertussis)
- Hepatitis A and B vaccines
- Typhoid vaccine
- Measles vaccine (if not immunised)
- Meningitis ACWY (mandatory if ongoing outbreak)
- Rabies (recommended), cholera (based on risk assessment)



<http://www.who.int/ith/en/>

**Similar symptoms with EVD**

# EVD vaccination

- Depending on area of deployment and type of work to be conducted in the field, an experimental vaccine rVSV-ZEBOV may be offered.
  - This vaccine works only for Zaïre ebolavirus.



WHO /S.Oka

# Malaria ABCD

- Be **A**ware of the risk
- Avoid mosquito **B**ites ← the best protection
- **C**hemoprophylaxis  
← antimalarial drugs are mandatory as malaria symptoms are similar to EVD
  - Malarone = Atovaquone + Proguanil
  - Doxycycline
  - Lariam = Mefloquine
- Immediately seek **D**iagnosis and treatment if fever
- Stand by emergency treatment (artemeter + lumefantrin)  
← ONLY as a first-aid emergency measure





# Travel medical kit



WHO /P.Christen



# Anticipate – Get informed – Adapt

- Country living conditions
- Wear appropriate clothes to the work you have to do (good comfortable shoes...)
- Climate (hot and humid)



WHO /A.Esiebo

# App: My health in emergencies

- Personal health tracking and communication between you and WHO SHW
  - You can find contacts of staff health focal points
  - You enter your physical and mental health condition daily; SHW will monitor it
  - You can record your daily temperature for 21 days after returning from the mission; SHW will monitor it
- If you are interested in the app, contact [SHWS@who.int](mailto:SHWS@who.int)



# During your mission: Stay healthy (1)



- Hand wash + dry with clean towel
- Hygiene measures for food preparation
- Cover food and water
- Well cooked
- Drinking filtered water
- House hygiene with regular disinfection of toilet facilities

# During your mission: Stay healthy (2)

- Sufficient hydration is important to prevent dehydration
- Adequate rest:
  - Immune system weakens when you are tired
  - Perception of risk changes the longer you are in the field, attention to safety precautions decreases
- Road safety: Always wear seat belts
- Avoid alcohol and stimulants



WHO /TDR /A.Craggs



# During your mission: Stay healthy (3)

- Because Ebola and other viral haemorrhagic fevers have non-specific symptoms and may be misdiagnosed as any common disease, AND because of the psychological stress on the ill person and surrounding persons, measures should be taken to prevent all kinds of diseases.
  - Avoid physical contact: No kissing, shaking hands or sexual contact.
  - Wear appropriate personal protective equipment (PPE) based on risk assessment, starting with hand hygiene.
- Your best protection: Your concentration.
  - Listen to your body.
  - Know your limits.


**Take care of your own health. Sickness will have an impact on you, the whole team and your family.**

# After the mission



- Post-mission debriefing with nurse/psychologist
- Monitor your health condition at least 21 days after returning from the country
- If any suspicious symptoms arise, do not go to work, hospital; stay where you are and call emergency service

# Summary

-  Because there is no "no-risk zone" in an Ebola outbreak, it is essential to have very good knowledge and understanding of how Ebola virus is transmitted and not transmitted before and during the mission (rumours, irrational fears...)
- **Strict application of standard precautions** related to the activities performed (outreach activities, Ebola medical centre, public health-care setting, waste management...) **is effective and will protect you.**

# Onset of symptoms during your mission without reported exposure

- If you feel unwell:
  - Don't panic. You may have diarrhoea, nausea, fever, headaches... for many reasons (stress, for example).
  - Safely stop what you are doing.
  - Perform hand hygiene with soap and water or alcohol rub regularly.
  - Report your symptoms to your field coordinator on the mobile phone without delay. A medical assessment will be done and appropriate decisions taken.



# Key contact



- Staff Health and Wellbeing Services

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WHO Geneva

[shwemergency@who.int](mailto:shwemergency@who.int)

+41 22791 1115




# Managing exposure to the virus through bodily fluids, including blood

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## Module 4

# In case of percutaneous and mucocutaneous exposures: Step 1

- Immediately and safely stop any current tasks.
- Leave the patient care area.
- Safely remove PPE:  Exposure during PPE removal can be just as dangerous for nosocomial transmission of haemorrhagic fever.
- Immediately wash the affected skin surfaces or percutaneous injury site with soap and water.
- Irrigate mucous membranes with copious amounts of water or an eyewash solution.

# In case of percutaneous and mucocutaneous exposures: Step 2

- Immediately report the incident to the local coordinator. **This is a time-sensitive task** and should be performed as soon as you leave the patient care unit (ideally within 1 hour).
- The local coordinator will immediately contact the clinical leader and SHW at HQ Geneva.
- An exposure incident report will be filled out to facilitate an individualized risk assessment and the most appropriate decision will be taken for the safety of the exposed person and other team members.
- The exposed incident report will be sent confidentially to SHW.



# Sudden onset of symptoms without reported exposure

If you feel unwell:

- Don't panic. Safely stop what you are doing.
- Perform hand hygiene with soap and water or alcohol rub regularly.
- Avoid all contact with other people, including colleagues.
- "Isolate" yourself in your hotel room or home.
- Call the coordinator on the mobile phone without delay to report the situation and your symptoms.



# Principles for medical evacuation



WHO /PAHO /V.Ariscain

- Any delay in reporting will compromise the evacuation process.
- Decisions for immediate evacuation out of the country will be based on degree of exposure and probability of infection.
- The exposed person will be evacuated with adequate means of transportation from the deployment area to an appropriate location/facility designated by WHO.
- Guidelines for time windows and means of transportation will be the responsibility of the director of SHW in Geneva.

# Debriefing and follow-up care

- You are asymptomatic. You are requested to report to SHW on your first day back to work. A post-mission psychological debriefing will be offered and scheduled.
- During the incubation period (21 days):
  - Stay within reach of a good-quality health facility in case of any symptoms
  - Monitor your temperature twice daily for 21 days after exposure
  - Be aware of the symptoms of infection
  - Report onset of symptoms immediately to SHW's physician
  - Referral to the appropriate infectious disease expert will be organized

# CONCLUSION – Your vigilance is requested

- It is **our** role to give you appropriate advice to minimize health risks.
- It is **your** responsibility to rigorously follow preventive measures to stay healthy and know your limits.
- Staying in good health is **vital** for you, your team, your family and the success of your mission.



# Key contact



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# Stress management in emergency deployment in the context of Ebola

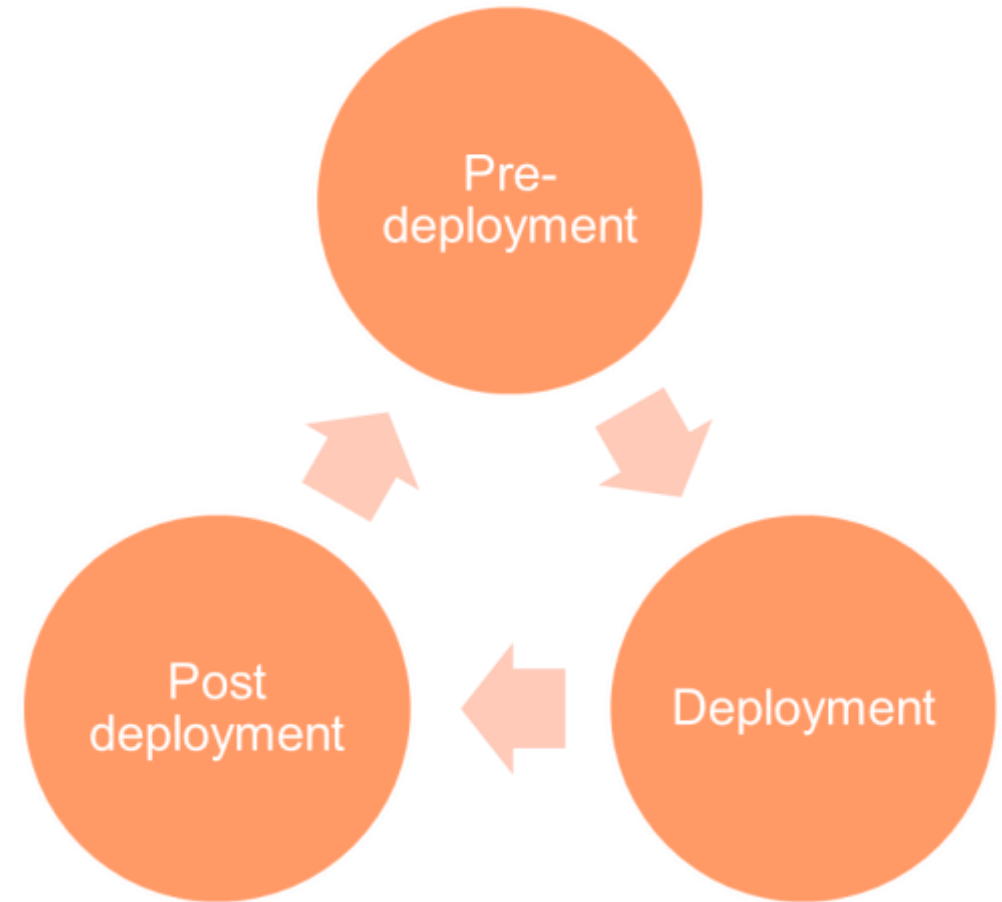
## Module 5

# Different types of stress



# The special stresses of mission assignment

- Individual stress
- Separation (from loved ones/familiar environment)
- Deployment – new environment, unfamiliar, more risks, pressure to perform in new teams, etc.





# Traumatic stress/Acute stress

- What is a critical incident (CI)?
- CI is defined as an event out of the range of normal experience – one which is sudden and unexpected, makes you lose control, involves the perception of a threat to life and can include elements of physical or emotional loss.
- Most people recover from it. Early intervention is likely to reduce CI stress reaction.

# Reactions to a critical incident or acute stress

## Immediate reactions

- Physical
- Behavioural
- Emotional
- Cognitive



WHO /F.Guerrero

# Signs of stress (1)

## 1. Physical signs

- Excessive sweating
- Stomach problems
- Nausea, headache
- Fatigue
- Backpain
- Sleep disturbances

## 2. Emotional signs

- Feeling overwhelmed
- Anger
- Cynicism
- Anxiety
- Sadness

# Signs of stress (2)

## 3. Cognitive signs

- Confused thinking
- Difficulty making decision
- Lowered concentration
- Memory dysfunction

## 4. Behavioural signs

- Isolation
- Change in eating and drinking patterns
- Crying
- Outburst of anger
- Hyperactivity



# Coping mechanisms for traumatic stress



WHO /R. Holden

- Talking
- Writing
- Counselling/  
support

# Good practices

- Good stress management starts with preparation and pre-deployment briefing
- During deployment: Self care
- After deployment, preparation for return to work and to family
- If available, end-of-mission debriefing



WHO /A.Suarez Weise

# Vicarious trauma



WHO /C.Black

- Simple: The negative effects of caring about and caring for others who have been hurt.
- Technical: The negative transformation in the helper that comes about as a result of empathetic engagement with trauma survivors and a commitment or sense of responsibility to help.



# Self-Awareness

- Emotional self-awareness: Reading one's own emotions and recognizing their impact, using “gut sense” to guide decisions
- Accurate self-assessment: Knowing one's strengths and weaknesses
- Self-confidence: A sound sense of one's self-worth and capabilities



WHO /S.Saporito



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