



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



Information & Guidance for Airport Authorities and Airlines On Viral Haemorrhagic Fevers (VHF)

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Section 1 – Overview of Viral Haemorrhagic Fever (VHF)

Viral Haemorrhagic Fevers (VHFs) originate in animals and may cause a severe, infectious, often-fatal haemorrhagic (bleeding) syndrome in humans. VHF viruses are generally transmitted to people from wild animals (such as fruit bats, non-human primates) and can then spread in the human population through direct contact.

Information on VHF viruses and how they are transmitted can be found in Chapter 1 of the VHF guidance on the HPSC website [here](#).

What are the signs and symptoms of VHF?

For information on recognizing the signs and symptoms of Ebola and other Viral Haemorrhagic Fevers, please refer to Chapter 2 of the VHF Guidance on the HPSC website [here](#).

Where are current VHF outbreak?

You can find information on recent outbreaks of VHF, and countries affected by VHF on the HPSC website [here](#).

Section 2 – The risk of importation

The risk of importation

Unplanned importation of VHF from an outbreak to a non-endemic country has historically been a rare event. In the rare event that a person infected with VHF was unknowingly transported by air, WHO advises that the risks to other passengers are low. Nonetheless, WHO advises public health authorities to carry out contact tracing in such instances.

Screening at airports

Entry screening of passengers for VHF at point of entry is **not** recommended. The use of thermal scanners that rely on the presence of fever in arriving passengers is costly and unlikely to detect any arriving person infected with VHF.¹

After a thorough risk assessment has been performed, exit screening of travellers *from countries affected by an extensive outbreak of VHF* as they leave ports and airports may be advised by WHO (as was the case in the 2014 West African EVD outbreak (EVD) and the 2019 DRC outbreak.)

Detailed information for humanitarian aid workers is available on the HPSC website [here](#).

Advice regarding travel from to and from affected areas

For information and country-specific travel advice please view the Department of Foreign Affairs website [here](#).

Advice regarding travel from affected areas

People are advised not to travel if they are unwell. Intending travellers who are ill should delay travel until cleared to travel by a doctor or public health authority.

Advice regarding travel to affected areas

Ireland's Department of Foreign Affairs and Trade (DFA) issues advice based on international and national risk assessment. It is important to be aware of the latest guidance from DFA, particularly during an unexpected outbreak in a country.

¹ The added value of entry screening, if exit screening is being conducted effectively, is likely to be very small, and the resource implications considerable.

Section 3 – Advice for airline staff and cabin crew if a suspected VHF case presents on board a flight

VHF Preparedness

In relation to VHF prevention and control, airlines should ensure:

- Airline personnel receive training about the possible sources of Viral Haemorrhagic Fever and measures to prevent transmission
- Personal Protective Equipment (PPE) is readily available for staff performing tasks that could result in exposure to VHF e.g. cleaning up blood, vomit or other body fluids from a sick passenger or cleaning surfaces potentially contaminated with VHF.
- Airline personnel who are required to use PPE receive training on what equipment to use, when and how to use it, and how to dispose of the PPE safely.

Management of ill travelers during a flight if VHF is suspected

The early symptoms of VHF infection can be vague so, although some passengers may have travelled to a country with VHF, cabin crew will not know for certain what illness the passenger has without further evaluation and laboratory testing. Therefore, cabin crew should treat all body fluids as infectious, and follow routine infection control precautions including strict attention to hand hygiene, when dealing with any ill travelers during a flight.

In the case of suspected VHF, additional precautions are needed (see following sections)

1. General management of an ill passenger on board an aircraft where there is no suspicion of VHF

- Designate one cabin crew member to look after the ill passenger, preferably the crew member who has already been dealing with this passenger. More than one crew member may be required if more care is needed.
- Wear disposable gloves (e.g. nitrile) when:
 - Providing direct assistance to an ill passenger
 - Coming in direct contact with body fluids e.g. handling used tissues, cleaning up spills of blood, vomit or diarrhoea or touching /cleaning potentially contaminated surfaces or toilet
- If direct contact with an ill passenger or contact with body fluids is necessary cabin crew should use the PPE available in the [Universal Precaution Kit](#).
- Hand hygiene is the single most important infection control measure.
 - Wash hands with soap and water for about 40-60 seconds after assisting an ill passenger or after contact with body fluids or surfaces that are contaminated.
 - An alcohol based hand rub solution is a suitable alternative but will not be effective if hands are visibly soiled.
- If possible, try to seat the ill passenger away from the other passengers or relocate the adjacent passengers.
- If the ill passenger has gastrointestinal symptoms e.g. diarrhoea or vomiting, seat the ill traveller near a toilet, dedicated for his/her exclusive use
- If the ill passenger has nausea or vomiting, provide them with an air sickness bag and tissues and a plastic bag for disposing of used items.
- Limit the number of passengers and crew who have contact with the ill traveller.
- PPE should be removed (as per training protocol) and discarded appropriately and hands washed with soap and water. An alcohol-based hand rub is a suitable alternative if hands are not visibly

soiled. If hands are visibly soiled and soap and water is unavailable, use an alcohol based sanitiser with at least 60% alcohol.

- Cabin crew should wash their hands after any direct contact with the ill passenger or their immediate surroundings or belongings.
- Ill passengers should be encouraged to wash their hands after using the toilet, vomiting or wiping their nose.
- Notify airport authorities immediately at the destination airport, in accordance with the Infectious Diseases (Aircraft) Regulations 2009.

NOTE re cleaning and waste: If VHF is suspected/ confirmed then specialised cleaning and waste advice will be needed and the HSE will advise.

In routine situations of illness with no suspicion of VHF: Notify the airlines' ground and cleaning crew so that arrangements can be made to clean the aircraft after the passengers have disembarked. Soiled items including used tissues, air sickness bags, oxygen mask and tubing, seat pocket items etc. should be disposed of in a biohazard bag, or an intact plastic bag which is sealed and labelled with biohazard sticker.

2. Specific Management if a suspected case of Viral Haemorrhagic Fever is identified on an aircraft: Public Health Alert

In addition to the routine infection control precautions outlined above:

- Isolate the sick passenger by creating space between the sick passenger and the other travellers or relocate the other travellers to empty seats.
- If the passenger has minimal symptoms e.g. fever only and no diarrhoea, vomiting or bleeding, cabin crew should keep interaction with the ill passenger as brief as possible, provide tissues and air sickness bags as necessary and a plastic bag for disposing of used tissues and air-sickness bags.
- Encourage the ill passenger to use alcohol-based hand rub. If the passenger has symptoms suggestive of VHF and has diarrhoea, vomiting or is actively bleeding, PPE from the [Universal Precautions Kit](#) should be worn by cabin crew members providing care. For additional information on the use of Personal Protective Equipment when managing cases of suspected or confirmed VHF, please see Chapter 3 of the VHF guidance [here](#).

NOTE regarding cleaning and waste: If VHF is suspected then specialised cleaning will be needed and the HSE will advise. Regular cleaners should not attend the plane. (See section 6 below). A specialist cleaning contract is under tender in Autumn 2019 by the HSE. At conclusion the HSE will be able to recommend a quality assured cleaning service to ports/ airports. A specialised waste management protocol should be developed between the airport and the chosen specialised waste management company.

As per the Infectious Diseases (Aircraft) Regulations 2009, **where VHF is suspected**, the airport authority should

- a) Activate the appropriate National Ambulance Service response for the case/s
and
- b) Activate an alert to the Department of Public Health through agreed channels.

The National Ambulance Service will assess the patient using their [Risk Assessment Algorithm](#): (Appendix D).

- a) No risk – All passengers and crew can disembark without further investigation.
- b) Other (than no risk) – As well as further risk assessment and case management, contact tracing of passengers and crew may be required. The Department of Public Health's Consultant in Public Health Medicine may request that a Travel Health Alert Announcement be made on board to inform passengers and crew as to

1. What is happening.
2. Why contact details for all on board are required and
3. The local Department of Public Health's contact number.

A copy of the **Travel Health Alert announcement (Appendix A)** should be given to all passengers/crew. Personnel should distribute and collect completed **Passenger Locator Cards (Appendix B)** for (i) passengers seated one seat in each direction from the ill person (ii) persons who reported direct contact with patient and (iii) crew serving that section.

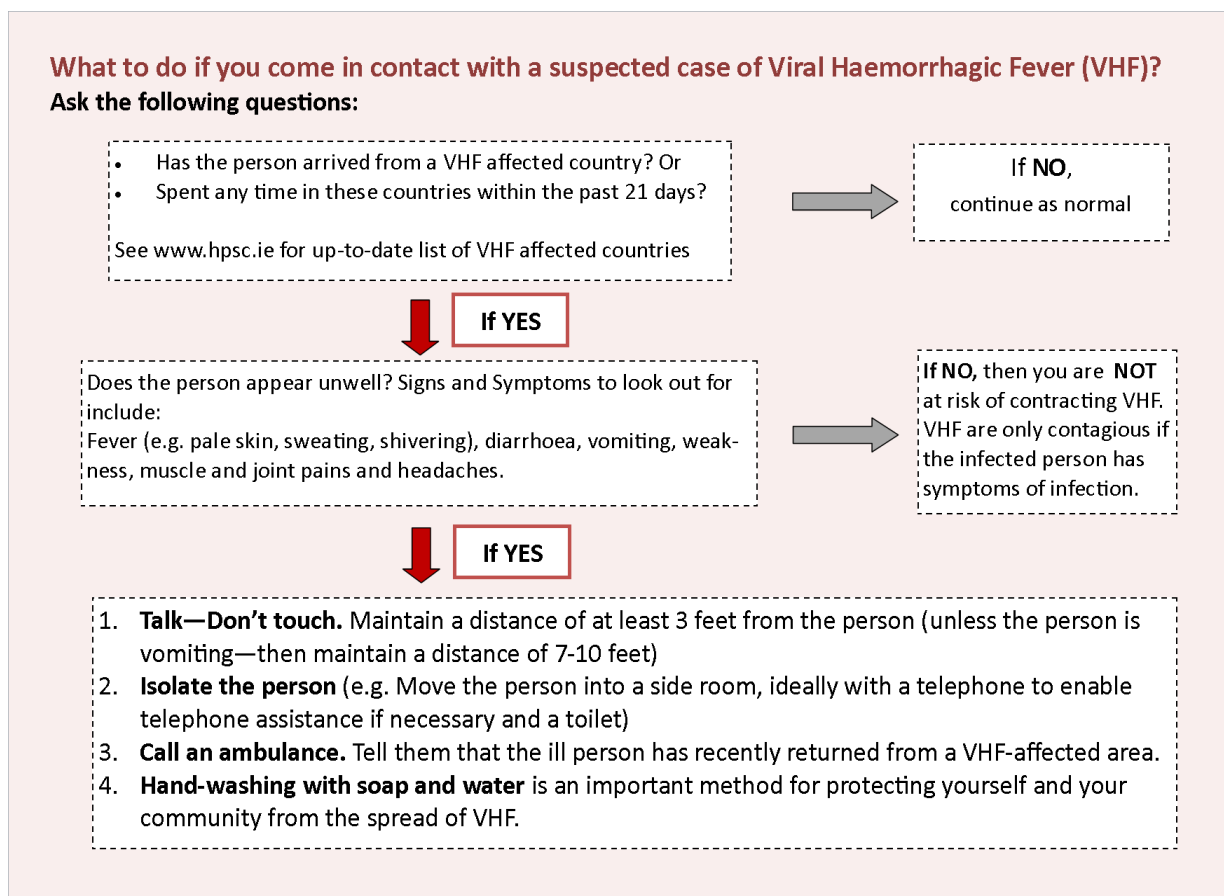
The Department of Public Health will request that details of all other staff/passengers should be gathered by the airline, using **Passenger Locator Cards (Appendix B)**. These should be distributed to cabin crew by the airline staff, given to all on board for completion, collected by cabin crew following completion and forwarded to the relevant Department of Public Health which will subsequently advise and follow up any identified contacts (passengers, crew or airport staff) as necessary.

The Department of Public Health may request the airline to furnish the passenger manifest urgently for contact follow up. Provision of this information to Departments of Public Health has been approved by the Data Protection Commissioner.

Pilots are required to complete and deliver to the airport duty manager the health part of the **Aircraft General Declaration (Appendix C)** concerning persons on board with communicable diseases or sources of infection. The airport duty manager should, in turn, forward this to the relevant Department Of Public Health.

Section 4 – Advice for ground staff if suspect VHF case presents at airport

Ground crew should follow the standard [HPSC advice for community non-healthcare settings](#).



The National Ambulance Service will undertake a risk assessment. They will perform a remote assessment where appropriate with the National Isolation Unit, Mater Hospital, and will liaise with Public Health, using the [Risk Assessment Algorithm](#).

Subsequently, appropriate cleaning/decontamination procedures will be informed by the outcome of the patient risk assessment. It may be necessary to quarantine the affected room for up to 24 hours until results are available to confirm or rule out VHF.

Section 5 – Advice for when a case of VHF is diagnosed after passengers have disembarked from an aircraft and dispersed from the airport

A diagnosis of VHF maybe suspected after passengers have disembarked from the aircraft.

In this instance, the Department of Public Health may request the airline to furnish the passenger manifest urgently for contact follow up. Provision of this information to Departments of Public Health has been approved by the Data Protection Commissioner as part of their remit in infectious disease investigation.

The Department of Public Health will then follow up with contact of airline crew, cleaning staff and passengers as appropriate.

Section 6 – Advice for cleaning personnel

VHF spreads by direct contact (e.g. touching) with blood or body fluids (including urine, faeces, vomit, saliva, sweat, breast milk and semen) from a person who is ill with VHF. Environmental surfaces that are contaminated with blood or body fluids may also spread the virus if they come in contact with your eyes, nose, and mouth or broken skin.

The airlines' ground and cleaning crews should be notified when there is an ill traveller on board an aircraft; when VHF is not suspected preparations can be made to clean the aircraft as per airline policy after the passengers have disembarked.

Advice for cleaning where a suspected case of VHF is identified on an aircraft

The area should be cordoned off and access to the area should be prevented until the area has been appropriately decontaminated. Regular cleaners should not attend the plane.

There may be a time interval between initial suspicion of a case of VHF and a decision being taken regarding the need for specialist cleaning and waste management services.

Where VHF specific cleaning and waste management have been deemed to be necessary, it is recommended that airport authorities contact a quality-assured, specialised contract cleaning agency, airport authorities should verify in advance that the staff provided by the specialized contractor are fully trained in donning and doffing PPE and have the appropriate PPE and other equipment to undertake the task safely. This is the responsibility of the airport/ airline and direct arrangements should be in place for this. Suggest mention waste management and link directly to the updated Management of Category A Infectious Waste Guidelines

Further information on the specialised cleaning process in instances where VHF is suspected is available from [the International Air Transport Association \(IATA\)](#). For further information on packaging and transport of suspected VHF waste by a specialist service see the following [guidance note](#).

In preparation for a potential case of VHF, it is considered that airport authorities should maintain a stock of necessary materials including packaging in line with the approved waste management solution for category A waste.

Section 7 - Guidance for air cargo personnel

Contact with luggage/cargo/parcels/freight

As VHF is only spread through direct contact with infected body fluids and direct contact with infected bushmeat², luggage/cargo/parcels/freight should not pose a risk unless **visibly soiled** with blood or body fluids or if containing bushmeat from affected countries.

Contact with luggage/cargo/parcels/freight belonging to a passenger with suspected VHF

The luggage belonging to a suspected case does not pose a risk if not visibly soiled. If not visibly soiled, the luggage may proceed to X-ray to check for the presence of bushmeat. If organic material is identified, full protective procedures should be followed as set out below.

Luggage belonging to a passenger with suspected VHF that is **visibly contaminated** with blood or body fluids or found to contain bushmeat, should be isolated in a locked secure area alongside waste from the suspected patient until the VHF test results are available.

² Bushmeat is meat obtained by hunting wild animals

If, when opened, luggage/cargo/parcels are found to contain such risk items that were not identified via x-ray, the examination should be discontinued immediately. The luggage/cargo/parcels should be isolated.

Further information on customs procedures can be found at the [HPSC website](#).

Section 8 – Sources of additional information

Situation reports are contained within the [WHO African Region Outbreaks and Emergencies Bulletin](#)

[European Centre for Disease Control – Update on VHF](#)

[Centers for Disease Control Infection control on Commercial Aircraft updated 2019](#)

[International Civil Aviation Association](#)

Appendix A: Travel Health Alert Announcement (in the event of a suspected case on board)

Travel Health Alert Announcement

Pilot / crew should:

1. Announce when requested by HSE *and*
2. Give a copy to all passengers and crew

START OF ANNOUNCEMENT

Travel Health Alert Announcement for Passengers & Crew on behalf of the Health Services Executive (HSE)

The Health Service Executive is assessing the risk of infectious disease on this aircraft following notification of a sick person on board. It will not be certain what illness the sick person has until test results become available.

As a precaution, the local HSE Public Health Area is advising:

- 1. If you feel ill anytime over the next 21 days you should: Call a doctor and Call the local Public Health Area and Mention this Travel Health Alert Announcement**

The symptoms to look out for include unexplained bleeding or bruising.

- 2. A Passenger Locator Card** may be circulated to everyone on board. The HSE Public Health Area asks you to complete the card and put in your contact details. This is very important. The Public Health Area will then be able to make contact with you in the coming days if needed.
- 3. All passengers and crew will be given a written copy of this Travel Health Alert Announcement.** Contact details for the local Public Health Areas are included.

END OF ANNOUNCEMENT

CONTACT DETAILS FOR PUBLIC HEALTH AREAS

Public Health Area A: +353 (0)46 928 2700
Cavan, Monaghan, Louth, Meath, Dublin North
Central, North-west Dublin, North Dublin

Public Health Area B: +353 (0)57 935 9891
Dublin South City, Dublin South West, Dublin West,
Kildare, Wicklow (West), Laois, Offaly, Longford,
Westmeath

Public Health Area C: +353 (056) 770 4301
Dublin (South East), Dun Laoghaire, Carlow, Kilkenny,
South Tipperary, Waterford, Wexford, Wicklow (East)

Public Health Area D: +353 (0)21 492 7601
Cork and Kerry

Public Health Area E: +353 (0)61 483 338
Limerick, Clare, North Tipperary

Public Health Area F: +353 (0)91 775 200
Galway, Mayo, Roscommon,

Public Health Area G: +353 (0)71 917 4750
Donegal, Sligo, Leitrim

Outside Office Hours: Your doctor will be able to contact Public Health through the National Ambulance Service.

Footnote: Your contact details and other relevant information will be collected using a World Health Organization (WHO) Passenger Declaration of health form for the HSE Dept of Public Health for contact tracing purposes under national legislation of S.I. No. 411/2009 — Infectious Diseases (Aircraft) Regulations 2009. Your details will be held as confidential information and will not be disclosed to any third party

Appendix C: Aircraft General Declaration of Health form

Sourced from the [International Civil Aviation Organization](http://www.icao.int) (ICAO) Annex 9 to the *Convention on International Civil Aviation*, Appendix 1

APPENDIX 1. GENERAL DECLARATION

GENERAL DECLARATION (Outward/Inward)		
Operator		
Marks of Nationality and Registration		Flight No. Date
Departure from (Place)		Arrival at (Place)
FLIGHT ROUTING (“Place” Column always to list origin, every en-route stop and destination)		
PLACE	NAMES OF CREW*	NUMBER OF PASSENGERS ON THIS STAGE**
		<i>Departure Place:</i> Embarking
		Through on same flight
		<i>Arrival Place:</i> Disembarking
		Through on same flight
<p><i>Declaration of Health</i> Name and seat number or function of persons on board with illnesses other than airsickness or the effects of accidents, who may be suffering from a communicable disease (a fever — temperature 38°C/100°F or greater — associated with one or more of the following signs or symptoms, e.g. appearing obviously unwell; persistent coughing; impaired breathing; persistent diarrhoea; persistent vomiting; skin rash; bruising or bleeding without previous injury; or confusion of recent onset, increases the likelihood that the person is suffering a communicable disease) as well as such cases of illness disembarked during a previous stop</p> <p>.....</p> <p>Details of each disinsecting or sanitary treatment (place, date, time, method) during the flight. If no disinsecting has been carried out during the flight, give details of most recent disinsecting.....</p> <p>.....</p> <p>Signed, if required, with time and date _____ Crew member concerned</p>		<p>For official use only</p>
<p>I declare that all statements and particulars contained in this General Declaration, and in any supplementary forms required to be presented with this General Declaration, are complete, exact and true to the best of my knowledge and that all through passengers will continue have continued on the flight.</p> <p style="text-align: right;">SIGNATURE _____ Authorized Agent or Pilot-in-command</p>		

297 mm (or 11 3/4 inches)

Size of document to be 210 mm x 297 mm (or 8 1/4 x 11 3/4 inches).

* To be completed when required by the State

** Not to be completed when passenger manifests are presented and to be completed only when required by the State.

←————— 210 mm (or 8 1/4 inches) —————→

Appendix D – VHF Risk Assessment for Ambulance Services, including attending a patient on an aircraft



VIRAL HAEMORRHAGIC FEVER (VHF) Risk Assessment for Ambulance Services



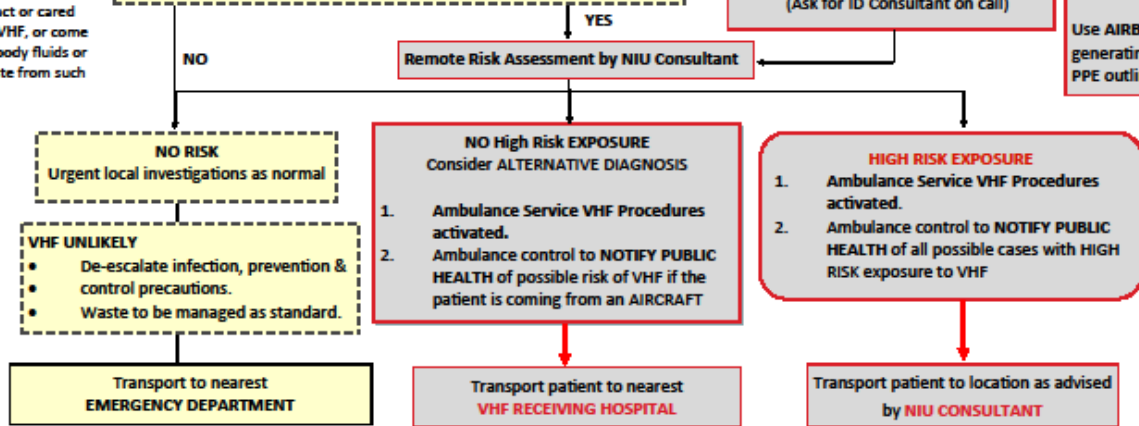
TALK but DON'T TOUCH. Keep distance of > 1 METRE

*Patient has visited an area with a declared VHF (e.g. Ebola, Marburg, Lassa, CCHF) outbreak, or has been in Lassa endemic areas, been in caves or in contact with or eaten primates, bats or antelope in a Marburg/Ebola endemic area, or been in an area endemic with Crimean Congo fever after sustaining a tick bite.
 **come into contact or cared for a patient with VHF, or come into contact with body fluids or contaminated waste from such a person.

Patient has FEVER >37.5°C or history of fever in previous 24 hours
AND
 Patient has returned from an area* affected by a current VHF outbreak within the last 21 DAYS
OR
 Has had contact with a confirmed or probable case of VHF**
If attending a patient on an aircraft see additional steps below before assessing patient

Initial Actions
 1. REMOVE PATIENT to a less crowded area for assessment.
 1. SURGICAL MASK for Patients with respiratory symptoms if tolerated
 2. AMBULANCE CONTROL to initiate direct phone contact between Paramedics and National Isolation Unit (NIU). Phone 01-8032000 (Ask for ID Consultant on call)

Standard Precautions (SP) PLUS
 The use of Level 1 or Level 2 PPE is based on local risk assessment.
Level 2 PPE usage essential for:
 -Unstable patient under investigation
 -Patient with bleeding, vomiting or diarrhoea
 -Patient requiring invasive/aerosol generating procedures
 Use AIRBORNE precautions for aerosol generating procedures (FFP3 mask plus PPE outlined above).



PUBLIC HEALTH CONTACT DETAILS
 Public Health Area A: 046 928 2700
 Public Health Area B: (0)7 9339891
 Public Health Area C: (0)36 770 4301
 Public Health Area D: (0)21 4927601
 Public Health Area E: (0)61 483 338
 Public Health Area F: (0)91 775 200/(0)71 917 4750
 NIU: 01-8032000
 OOH contact for DPH/MOH—Call Ambulance Control on 112/999 and ask to be connected to Public Health on call.

IF ATTENDING PATIENT ON AIRCRAFT ACTIVATE THE PUBLIC HEALTH ALERT
AMBULANCE PERSONNEL should:
 A. DON PPE before entering.
 B. DISTRIBUTE and COLLECT Passenger Locator Cards for (i) PASSENGERS SEATED ONE SEAT in each direction from the ill person (ii) persons who reported direct contact with patient, (iii) crew serving that section.
 C. FORWARD these priority cards with report copy directly to PUBLIC HEALTH
 D. REQUEST CABIN CREW to: (i) Announce the Travel Health Alert Announcement (ii) Distribute and collect Passenger Locator Card from ALL OTHER passengers and crew (iii) Distribute a copy of the Travel Health Alert Announcement leaflet to all passenger and crew. (iv) Completed Passenger Locator Cards should be provided to local Public Health Department
 E. ALL WELL PASSENGERS should then be allowed to DISEMBARK, using exits without passing the patient.

