

ADVICE ISSUED BY SPANISH GOVERNMENT WITH REGARD TO CASES OF EBOLA IN SPAIN

The recent cases of Ebola in Spain have led to a growing demand for professional training **with regard to the medical transport and measures to protect medical personnel.**

The Ebola virus is very contagious, and it is also very lethal. Transmission only occurs when there are symptoms in patients and through contact through secretions, organs, blood or other fluids. It may be due to a direct or indirect contact although the capacity for survival of the virus of the Ebola in the environment is very low, about 6 hours of life, and it dies with a simple SOAP and water cleaning.

The symptoms of the virus, develops in several phases, and there are a few symptoms that differ to other tropical and viral disease. Making Ebola difficult to detect. It is for this reason that the confirmation it is only positive through a PCR test. **The virus manifests itself during the 21 days after initial infection.** Currently, there is no treatment for the disease, although treatments are being developed together with experimental vaccines. For sufferers of the virus there is a need for application of advanced life support. There are several measures of control to prevent infection, such as the isolation of patients who have symptoms and early detection.

The recommendation for the medical transport is to limit a number of vehicles and professionals dedicated to the transport of Ebola patients, they should be well-trained in the matter, to reduce the risk to people and vehicles exposed to the virus, giving the priority to the security against any urgency.

Activation and control of the transport of a suspected case corresponds to public health policies, which determines the degree of suspicion and proceeding in the case, i.e., transport services they only undertake such transport at the suggestion of the public health Authority

Guidelines for vehicle and staffing

The rear of the ambulance must be separated from the driving area and the bulkhead must be encased perfectly in plastic. On the compartment side, the material must be plasticized and protected with two bags. For the disinfection of the cockpit, is they removed all plastics and it is disinfected with bleach.

Need of the transfer by ambulance staff is made up of three people in the cockpit, a driver and an observer. Are divided into two types: the first is "the clean man", which will help the cleaning after the removal of the outer layers and that in the case of transport corresponds to the driver, and the second is the observer, they cannot touch any of the areas in which the patient is located. Their activity is limited to driving and the closing and opening of doors, opening from the outside and control when it comes to handling materials infected. At no time should they help move the patient or the material of the ambulance. By other hand, is the "dirty man" who works directly with the patient or the material and is responsible for the cleaning of the outer layers?

After the transfer of the patient to the hospital of reference, the driver clean man, addresses the basis for Proceeding to the disinfection of the vehicle, while the personnel that have been directly exposed to the virus in the rear compartment, dirty men, should go to the hospital of reference for a more thorough disinfection. After the rear compartment staff have carried out the functions of transfer of the patient, and waste disposal the rear compartment should then be sprayed with bleach it. On the other hand, an outside observer will monitor the disinfection is carried out scrupulously.

Patients suspected, but not confirmed, are required for ambulance type A1 or B, with stretcher, material first aid, oxygen bullet and wheelchair only. At no time undertake any intravenous action during the transfer. In cases of confirmed sickness, the ambulance must be type C, with stretcher, spinal board, wheelchair, backpacks (airway, nursing and pediatric), resuscitator, and respirator filter and monitor automatic vacuum cleaner.

All ambulances must have red bags for bio-hazardous material, vomiting collection bags.

If He/she can manipulate then they can disinfect themselves, a spray - lye - sodium hypochlorite and duct tape, as well as equipment individual protection (PPE). In cases of confirmed patients, the patient will be in the closed capsule to transport it. For the transfer of cases in Madrid there must be included two ambulances (2nd one in case of breakdown) and Police protection throughout, to avoid unforeseen catastrophic.

In terms of the practice of the use of PPE, The highlight is has the bag properly indicated and the importance **of dressing and undressing in binomial, to reduce the risk of contagion.** Wears one from bottom to top, with double coating and sealing the ends with duct tape. For undress, will be from outside to inside, leaving the mask and the shims to the end.

The cost of PPE, has increased recently, due to the high demand from 10€ to 45€ each.