



KEY POINT SUMMARY

OBJECTIVES

To describe how to properly prepare an ICU room and staff for the treatment of patients afflicted with the Ebola virus.

DESIGN IMPLICATIONS

Designers responsible for organizing the creation of an EVD-ICU should carefully consider appropriate locations for the airlock entrance to the room due to the importance of pressure gradients within this space and the inherent danger of the EVD-ICU itself.

Entrances and exits from EVD-ICUs should be closely monitored, possibly by camera, to reduce risk of further contamination.

Preparing an ICU room to welcome a critically ill patient with Ebola virus disease

Pasquier, P., Ficko, C., Mérens, A., & Dubost, C. 2015 | *Intensive Care Medicine* Volume 41, Issue 1, Pages 118-119

Key Concepts/Context

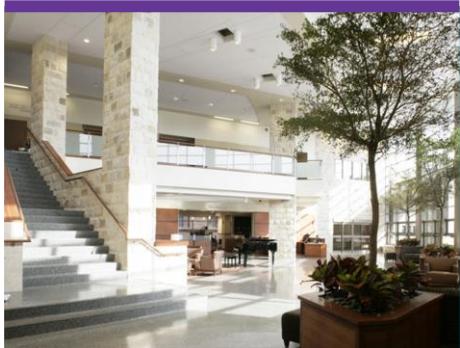
Ebola virus disease is a viral hemorrhagic fever that spreads through direct contact with the body fluids of an infected animal or human. Contamination may also occur through contact with items that were recently contacted by infected bodily fluids. No spread of the disease through the air has been documented. As no specific treatment or vaccine for the virus is currently available, specially coordinated medical services are necessary to control outbreaks. Ebola virus disease-intensive care units (EVD-ICUs) must be fully equipped for safe management and intensive care, and special attention should be given to the safety of the healthcare workers caring for EVD patients.

Methods

- An airlock kept in negative air pressure should precede EVD-ICUs, along with an increasing pressure gradient from the airlock to the room.
- Along with typical ICU equipment, an EVD-ICU should also include dedicated materials that will remain in the room for the entire length of a patient's stay, such as a mobile X-ray system, a portable ultrasound machine, specific equipment for waste disposal, and a field laboratory covered with a pyramidal portable glove bag.
- All healthcare workers should wear protective equipment such as single-use impermeable gowns, hoods, face masks, two pairs of nitrile gloves (one with extended cuffs), boots, and goggles.

Findings

No findings were described in this article.



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Limitations

This article acts as a brief informative piece regarding the proper equipment necessary for an ICU to safely treat patients infected by EVD. Accordingly, no reasoning or evidence is provided to support why these specific pieces of equipment are recommended.

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