

# Example: Standard Operating Procedure (SOP) for Patient Handoff between a Healthcare Facility and a Transporting Ambulance

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## Purpose

This document provides guidance to facilitate planning for and execution of patient handoff between personnel at a fixed facility (hospital or clinic) and the transporting ambulance agency. Information is presented in a chronological format and is provided at a level of detail that will afford local planners and operators the flexibility to develop procedures that are suitable for their environment. References from peer-reviewed literature are included and provide greater detail as articulated by the authors.

The following key assumptions are being made:

- All healthcare workers (hospital and out-of-hospital) who are involved will have received education and training and demonstrated the necessary competencies for management of patients with serious communicable diseases.
  - Healthcare facilities and transporting ambulance agencies have procedures for the management of patients with serious communicable diseases.
  - Facilities and transporting ambulance agencies are conducting tabletop and operational exercises that test and refine procedures for the transfer of patients.
  - This guidance complements other CDC guidance for management of patients with serious communicable diseases.
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## Mobilizing for patient transport

- Notify responsible parties, including sending facility, receiving facility, transporting ambulance agency, public health authority, emergency management agency, law enforcement, and (if applicable) aviation and hazardous materials management and disposal.
  - Establish a communications plan that identifies all points of contact and distribute it to all parties to facilitate communication.
  - All parties should consider notifying their public affairs official.

- Discuss methods of notification, as radio and other non-secure methods of communication may be monitored by the media or the public.
- Communicate to all parties the patient's risk of exposure to Ebola and clinical condition.
  - Communicate whether the patient will be ambulatory or non-ambulatory.
- Confirm transporting ambulance personnel and receiving facility personnel have appropriate personal protective equipment (PPE) ensembles (they may be different depending on mission requirements and patient condition).
- Confirm and communicate with the designated point of contact at each facility the location for transition of patient care at point of origin and destination – this location will likely be pre-determined by facilities and chosen in order to minimize environmental exposure at the facility and prevent exposure of unprotected staff, patients, and visitors.
- Confirm and communicate location for donning and doffing of PPE for transporting ambulance personnel and ambulance decontamination and disinfection.
  - Affirm appropriate supervision for the doffing of ambulance personnel. Hospital PPE and doffing protocols may be different and therefore supervision may need to be specific to the ambulance crews involved.
  - Personnel doffing and ambulance decontamination locations must be prepared to manage regulated waste.
- Determine the need for additional security with sending and receiving facility security, as well as local, county, state public safety and law enforcement personnel both during transport and at the healthcare facilities.

## Preparing for transfer of patient and patient care

### Sending facility

- Maintain appropriate infection control posture while managing patient.
- Determine appropriate level of personnel to accompany patient during transfer.
- Provide management of volume depletion and nausea/vomiting as much as possible to facilitate event-free transport.
- Be prepared to communicate with transport agency directly to provide up-to-date patient status and facilitate patient transfer.
- Advise transporting ambulance agency about any patient belongings that may accompany patient.
- Determine and communicate whether patient is ambulatory or will require a stretcher transport.
- Obtain vital signs immediately before transfer of care to share with transport team.
- As mutually agreed upon with transporting ambulance agency and just prior to their arrival, have patient apply barrier garments with the goal of limiting exposure of transport team or vehicle (e.g., as tolerated), including footed impermeable suit, surgical mask, and gloves for ambulatory patient, or impervious sheets and surgical mask for non-ambulatory patient, and adult undergarment, as needed.
- Communicate transport plan to family and friends of patient, as appropriate.
- Provide written patient care report (PCR) that includes signs and symptoms and care rendered. Provide PCR to transporting ambulance agency in a manner that assures it is contamination-free.

- Ensure patient's property is secured and documented appropriately (assume property is contaminated).
- Transfer patient care and any belongings to transport team.
- Follow facility SOPs for mission completion, which may include disinfection of exposed environmental surfaces, etc.

## Transporting ambulance provider

### Before transport

- Ensure transportation readiness:
  - Confirm that receiving facility is ready for patient arrival.
  - Confirm patient's condition and level of personnel required to accompany patient during transfer.
  - Confirm whether additional passengers are being transported (family, etc.).
  - Confirm location for decontamination and disinfection of ambulance and doffing of ambulance transport personnel PPE. Confirm hospital (or contracted service) is prepared to handle contaminated waste.
  - Communicate with designated emergency management officials and coordinate with the agency that will be providing security as required for the mission.
  - Confirm that all agencies involved in patient transport have access to secure communications.
  - Ensure procedures have been implemented to limit contamination of ambulance environmental surfaces (isolation of driver compartment, draping, etc.).
  - Ensure adequate inventory of supplies and appropriately-sized PPE for the personnel who are assigned to the transport mission.
    - Barrier drapes and tape for transport vehicle as indicated
    - PPE ensemble – correct size suits, back-up PPE for possible breach, charged batteries if using powered air-purifying respirator (PAPR), etc.
    - Supplies for decontamination and disinfection – U.S. Environmental Protection Agency (EPA)-registered hospital disinfectant wipes effective against the known or suspected pathogen, hand disinfectant, a “spill kit” (household bleach, absorbent towels and appropriate water-tight container to secure gross contamination), etc.
    - Supplies for waste collection – biohazard bags, autoclave bags
  - Ensure appropriate medical director (or appropriate person providing medical oversight) is immediately available throughout the transport.
  - Hold mission briefing for transport team to review:
    - Purpose and team primary contacts
    - Transport provider health check
    - Patient history and condition
    - Infection control posture – ambulance configuration and personnel PPE
    - Team member (paramedic, EMT, driver, supervisor/safety officer, EMS physician, etc.) roles and responsibilities, including supervision of donning and doffing procedures, etc.
    - Relevant clinical care guidelines including appropriateness of interventions or invasive procedures
    - Transportation of patient samples and medication, if applicable

- Transfer of paper or electronic ambulance patient care records in a way that avoids contaminating the receiving facility
- Decontamination and disinfection procedure
- Waste collection and mission recovery
- Post-mission surveillance
- Special considerations – transfer of patient across state borders, deterioration of patient condition in transit, vehicle malfunction and other contingencies, etc.
- Media discipline

#### During transport

- Communicate with sending facility for patient updates and to confirm patient transfer location.
- Contact sending facility to verify patient management steps have been taken to facilitate event-free transport and reduce risk of exposure.
- Depart for patient location and provide estimated time of arrival (ETA) for ambulance at sending facility.
- Communicate with designated point of contact at each facility the arrival of transporting ambulance at sending and receiving facilities.
- Observe donning of PPE and when ready, proceed to make patient contact (only the minimum number of providers necessary to manage the patient should be present).
- Conduct brief patient assessment to determine patient's stability, "dry" or "wet" symptoms, and need for intervention before and/or during patient transport. Clearly define appropriate interventions for patient deterioration/decompensation. Consider minimizing patient contact. For example, consider not obtaining vital signs if patient is "dry," has no visual evidence of distress or shock, and transport time is not prolonged.
- Transport patient in impervious suit if ambulatory, or in impervious sheets if non-ambulatory and stretcher-bound, as tolerated.
- Consider any patient belongings to be contaminated, which are typically bagged, labeled, and transported with the patient in the patient compartment.
- Any documents provided by sending facility should be free of contamination. When in doubt, consider them contaminated and package as appropriate for transport by ambulance personnel.
- Report patient's condition and ETA to receiving facility to facilitate their readiness to receive patient from transport agency immediately upon arrival, thus avoiding PPE-induced fatigue/dehydration for patient, ambulance crew and/or receiving staff.

#### Upon arrival

- Confirm arrival with receiving facility and specific route of travel within facility before debarking ambulance with patient.
- Transport patient to designated location in receiving facility – via the most direct route to isolation unit – ambulatory vs. stretcher.
- Ensure route of travel is secure.
- Transfer patient care to receiving facility team as arranged (and exercised).
- Return to ambulance and proceed to designated decontamination/disinfection station.
- Disinfect ambulance per SOP.
- Ambulance transport personnel doff PPE under supervision of qualified personnel (transport agency PPE ensemble and SOP may differ from hospital).

- Have appropriately trained personnel package waste from ambulance transport.
- Transfer waste to hospital or appropriate agency as previously arranged and in accordance with applicable regulations.
- Secure mission, debrief providers, and initiate post-mission surveillance as indicated.

### Receiving facility

- Ensure isolation unit is ready to receive patient.
- Prepare arrival site and route of entry to isolation unit – ambulatory vs. stretcher transport.
- Communicate with ambulance transport agency regarding readiness to receive patient, route of entry, and location of patient transfer.
- Confirm location for ambulance decontamination/disinfection and personnel doffing of PPE.
- Consider need for security on route of intra-facility patient transport (e.g., from ambulance entrance to the designated ward or unit) and/or in decontamination area (if on hospital premises).
- Prepare to receive biohazard waste from transporting ambulance agency and facilitate waste management.
- Inform appropriate public health, emergency management, and public safety authorities on arrival of patient.
- Communicate any diagnostic test results to transporting ambulance agency as appropriate to inform need for continuing post-mission surveillance of ambulance providers (EMTs, paramedics, etc.).

## References

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