



Air & Surface Transport Nurses Association Position Statement

Transport of Patients with Serious Communicable Diseases

Background

The Air & Surface Transport Nurses Association (ASTNA) recognizes the importance of ongoing attention to infection control and prevention measures in the transport of patients with serious communicable diseases. Maintaining safety during all aspects of transport requires adherence to standard infection prevention and control practices.

The transport team is likely to be at added risk for exposure due to factors such as environmental conditions and interventions performed, and thus must be aware of the most current information available from infectious disease specialists to make informed practice decisions.

The speed at which evolving microbial threats are appearing today and the impact these threats has on the environment in which health care transport professionals work has prompted ASTNA to focus on the following viral agents:

- Ebola virus disease (EVD), which is a serious communicable disease given its associated morbidity and mortality rates, the risk it poses by human-to-human transmission, and the absence of available vaccines for protection against the virus
- Enterovirus D68 (EV-D68), which was associated with a nationwide outbreak of severe respiratory illness in 2014. These cases predominantly affected infants and children, many with underlying respiratory conditions such as asthma.
- Seasonal influenza, which appears with new variations annually resulting in vaccines that provide significantly reduced protection, given the genetic drift of the circulating (H3N2) influenza strain. Children younger than age 2 years, adults 65 years and older, pregnant women, and many individuals of Native American descent and Alaskan Native descent are at highest risk.
- In 2020, CDC is responding to an outbreak of respiratory disease caused by a novel (new) coronavirus that was first detected in China and which has now been detected in 60 locations internationally, including in the United States. The virus has been named

“SARS-CoV-2” and the disease it causes has been named “coronavirus disease 2019” (abbreviated “COVID-19”). Current understanding about how the virus that causes coronavirus disease 2019 (COVID-19) spreads is largely based on what is known about similar coronaviruses. COVID-19 is a new disease and there is more to learn about how it spreads, the severity of illness it causes, and to what extent it may spread in the United States. The CDC has released several resources for the EMS and 911 community. AAMS has assisted in identifying COVID-19 issues specific to the emergency air medical community, including issues obtaining personal protective equipment (PPE), staffing, or need for increased guidance or coordination.

While we are informed that the risk to US is still low, you should be increasing preparedness accordingly. As the situation and recommendations are dynamic and may change, ASTNA recommends the use of the most current evidence and practice guidelines released by the CDC.

Some specific resources provided by NHTSA EMS:

- Webinar: “What EMS and 911 need to know about COVID 19 – February 24, 2020: <https://www.youtube.com/watch?v=ZrnbufgDqjo>
- CDC Interim Guidance for EMS and 911 PSAPs for COVID-19 in the US: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html>
- Healthcare Supply of PPE: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/healthcare-supply-ppe.html>
- Strategies for Optimizing the Supply of N95 Respirators: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirator-supply-strategies.html>

Health care providers in the out-of-hospital setting must not contribute to secondary transmission of communicable illness; thus, fastidious application of infection control procedures is required.

Transport of patients with viral hemorrhagic fevers, such as EVD or Marburg hemorrhagic fever, requires specialized equipment, policies, and procedures. Current Centers for Disease Control and Prevention (CDC) and state guidelines should be followed for transport and decontamination of these patients, and emergency contact numbers for the CDC and state health departments should be readily available for real-time guidance.

Education and Standards for Infection Control Practices

Medical teams transporting patients with suspected or confirmed infectious diseases should follow infection control standards outlined by the World Health Organization (WHO), the

Occupational Safety and Health Administration (OSHA), and the CDC. In 2017, Emory University was awarded a grant by the National Institute of Environmental Health Services (NIEHS) Worker Training Program to develop a course for individuals who may be at risk for exposure to serious communicable pathogens, including emergency responders and individuals who work in public health and other health care settings. The NIEHS Worker Training Program provides education about infection control principles and specifically increases awareness of serious communicable pathogens.

The Commission on Accreditation of Medical Transport Systems (CAMTS) is an accreditation body that has developed standards for critical care transport teams, including standards for infection control practices, as follows:

- Development and implementation of written policies and procedures addressing transport issues and challenges found in the care of patients with communicable diseases, infectious processes, and health precautions for all personnel and patients.
- Annual review of policies and procedures for medical transport of patients with infectious diseases to ensure compliance with current local, state, and national standards, including but not limited to OSHA, CDC, and WHO
- Precautions to ensure that transport team members are protected from contracting communicable diseases by maintaining current vaccinations, receiving appropriate training on donning and doffing personal protective equipment (PPE), and ensuring proper decontamination of transport vehicles
- Transport programs must have a readily available exposure control plan consistent with national standards that addresses the following:
 - A reference for work restrictions for transport personnel when an exposure occurs or an employee has an infectious disease
 - An outline of exposure risks and diseases prevalent in coverage areas including national risks
 - A bloodborne pathogen program, including pathogen transmission, consistent with OSHA standards
- Development of education programs consistent with current CDC recommendations and OSHA guidelines regarding infectious diseases. Initial and annual training should be required for all transport team members, with supplemental training for specific pathogens that pose a threat to transport personnel.
- Development of policies and procedures for post-exposure management of transport personnel that are consistent with CDC and OSHA guidelines

Cleaning of Equipment and Transport Vehicles

Aircraft and ground vehicles should be terminally cleaned and decontaminated after transporting patients with highly infectious diseases. The type of vehicle selected for transport may depend on its suitability for effective decontamination before return to service. Additional guidelines include the following:

- Appropriate PPE should be donned prior to entering the decontamination area.
- Cleaning agents should be EPA-approved disinfectants with label claims specific to the suspected organism.
- Objects and surfaces soiled with blood or bodily fluids should be cleaned according to the instructions on the disinfectant's label.
- Emphasis must be placed on cleaning patient care areas and exposed surfaces, specifically medical equipment and control panels, and flooring, walls, and work surfaces in the transport vehicle. Stretchers and litters, including railings, wheels, brackets, and other areas likely to become contaminated should receive special attention.
- Only mattresses and pillows with plastic or other impermeable covers should be used.
- All soiled linen, supplies, and patient-generated waste should be disposed of in accordance with CDC guidelines.

ASTNA Position

- ASTNA supports standards for comprehensive exposure control plans designed to protect team members from exposures to blood and other potentially infectious body fluids, communicable diseases, infectious processes, and other health precautions.
- ASTNA supports use of the most current evidence and practice guidelines for transporting highly infectious patients. These guidelines are based on the most current information collected from OSHA, WHO and the CDC, and are meant as baseline knowledge.
- ASTNA supports its members and affiliates participating in the free Clinical Biosafety Awareness course found at <https://vimeo.com/393298804/d84e02e89b>.

Bibliography

Air & Surface Transport Nurses Association. *ASTNA Critical Care Transport Nurse Safety in the Transport Environment*.

https://cdn.ymaws.com/www.astna.org/resource/collection/4392B20B-D0DB-4E76-959C-6989214920E9/ASTNA_Safety_Position_Paper_2018_FINAL.pdf. Published April 2018. Accessed January 2019.

Canvas Network. Clinical biosafety awareness. <https://vimeo.com/393298804/d84e02e89b>. Published June 2017. Updated February 2020. Accessed March 2020.

Commission on Accreditation of Medical Transport Systems. *Accreditation Standards*. 11th ed. Anderson, SC: Author. <https://www.camts.org/standards/>. Updated October 2018. Accessed January 2019.

US Centers for Disease Control and Prevention. Enterovirus D68. <http://www.cdc.gov/non-polio-enterovirus/about/ev-d68.html>. Published November 2018. Accessed January 2019.

US Centers for Disease Control and Prevention. Weekly U.S. influenza surveillance report. <http://www.cdc.gov/flu/weekly/index.htm#S3>. Published December 2018. Accessed January 2019.

US Centers for Disease Control and Prevention. Infection prevention and control recommendations for hospitalized patients with known or suspected Ebola virus disease in U.S. hospitals. <http://www.cdc.gov/vhf/ebola/hcp/infection-prevention-and-control-recommendations.html>. Published August 2018. Accessed January 2019.

US Centers for Disease Control and Prevention. Webinar: “What EMS and 911 need to know about COVID 19 – February 24, 2020: <https://www.youtube.com/watch?v=ZrnbufgDqjo>. Published February 2020. Accessed March 2020.

US Centers for Disease Control and Prevention. CDC Interim Guidance for EMS and 911 PSAPs for COVID-19 in the US: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html>. Published February 2020. Accessed March 2020.

US Centers for Disease Control and Prevention. Healthcare Supply of PPE: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/healthcare-supply-ppe.html>. Published February 2020. Accessed March 2020.

US Centers for Disease Control and Prevention. Strategies for Optimizing the Supply of N95 Respirators: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirator-supply-strategies.html>. Published February 2020. Accessed March 2020.

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