



**Oakland County Medical Control Authority**  
**PROCEDURE**  
**INTERFACILITY HIGH FLOW NASAL OXYGEN (HNFO)**  
**(MCA Optional Protocol)**

Initial Date: 9/14/2023  
 Revised Date:

Section 7-26



**Interfacility High Flow Nasal Oxygen (MCA Optional Protocol)**

*This protocol is for paramedic use only*

Purpose: To outline the process for paramedics who have received MCA approved training, to transport a patient on a high flow nasal cannula during an interfacility transport.

Medical Control Authorities choosing to adopt this supplement may do so by selecting this check box. Adopting this supplement changes or clarifies the referenced protocol or procedure in some way. This supplement supersedes, clarifies, or has authority over the referenced protocol.

In conjunction the MCA must also select the option for Interfacility High Flow Nasal Oxygen on the **8.15 Interfacility Facility Patient Transfers Protocol**.

- I. Indications
  - A. Order from sending facility/physician
  - B. Hypoxic respiratory failure, hypoxic respiratory distress, respiratory distress
  - C. Availability of an MCA approved high flow nasal cannula device and necessary supplies required to facilitate transport of patient.
  - D. Adults (> 14 years of age)
  - E. Pediatrics ( $\leq$  14 years of age) per MCA selection for allowance and/or staff requirements.

MCA approval for pediatric HFNO ( $\leq$  14 years of age) WITHOUT accompanying hospital staff

NO – Staff must accompany patient

YES - Enhanced Paramedic or Critical Care Paramedic only

YES – Paramedic who has received additional MCA approved training.

MCAs will be responsible for maintaining a roster of the agencies choosing to participate and will submit roster to MDHHS

- II. Contraindications
  - A. Inability to provide continuous, humidification using an approved delivery device
  - B. Inability to provide therapy through appropriately sized nasal prongs
  - C. Insufficient supply of oxygen to complete the transport

- III. Procedure
  - A. Ensure that an adequate supply of oxygen is available for the transport.



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- i. Calculate the amount of oxygen needed prior to departure.
    - ii. Ensure that you have at least two times the amount of oxygen anticipated.
  - B. Perform appropriate patient assessment, including obtaining vital signs, pulse oximeter reading, cardiac rhythm, and current device settings
  - C. Set FiO<sub>2</sub> to maintain SpO<sub>2</sub> at or above 94% or to patient's targeted baseline oxygen saturation as directed by the sending physician. Utilize facility settings as starting point, if available.
  - D. Set flow rate in liters per minute (L/min) to decrease work of breathing.
    - i. Utilize facility settings as starting point, if available.
    - ii. Flow calculation: 2 L/kg/min up to the first 12 kg, plus 0.5 L/kg/min for each kg thereafter, up to a maximum flow rate of 60 L/min.
  - E. Reassess vitals, work of breathing, mental status, and breath sounds. Reassessment should be continuous, but documentation of vitals must occur at least every five minutes throughout patient contact.
  - F. Consider the need for escalation of respiratory support if patient remains in respiratory failure on more than 2 L/kg/min of flow or maximum settings for the delivery device.
  - G. If patient deterioration occurs, terminate HFNO and begin positive pressure respiratory support via CPAP, BIPAP, BVM, or intubation, if necessary.

**NOTES:**

- A. For suspected or confirmed COVID-19 patients, personnel must don respirators, eye protection, gowns, and gloves for transport.
- B. Patients with congenital heart conditions may have baseline saturations considerably lower than 90% and driving saturations higher than the target can be harmful for these patients.

Protocol Source/Reference: Michigan 7.26 Interfacility HFNO; Version 2/24/23.