User Guide
Houston Methodyst Aerosol Container

Houston Methodist physicians and staff developed the Houston Methodist Aerosol Container (HMAC) to shield health care workers from expelled air when intubating a patient. This serves as a step-by-step guide for use of the HMAC.

**STEP 1** Retrieve HMAC box, vacuum container and complimentary accessory bag from its storage location in the unit.

**STEP 2** Perform a brief visual inspection of the plastic containment field to ensure it is free of defects and biological fluids.

**STEP 3** Place the HMAC over the patient’s head and shoulders, making sure that the box is stable and provides enough room for the intubating physician to reach the patient’s head and neck.

**STEP 4** Inside the accessory bag, there is a packaged sterile surgical drape. Open the package - sterility is not important for this occasion – and remove the protective lining covering the adhesive on the drape.1

**STEP 5** Apply the drape to the open end of the box, ensuring it covers the entirety of the opening. The drape is intended to further assist in the containment of any aerosolized particles and does not need to create a full seal around the patient and HMAC.

- The drape allows other providers to assist in the procedure.
- Examples: passing equipment, manually stabilizing the airway

**STEP 6** The box has two holes, located toward the top of each lateral side of the HMAC. Depending on the location of the vacuum box, remove the solid stopper and insert the vacuum hose and its modified accompanying stopper.

**STEP 7** Turn on the vacuum. Testing has shown this vacuum to be sufficient in removing aerosolized particles while not creating too much noise or having a detrimental suctioning effect on the patient.

**STEP 8** Perform the procedure.

**STEP 9** After the procedure is completed, the providers are instructed to wait up to 30 seconds for the vacuum to remove any lingering particulates.

**STEP 10** Turn off the vacuum.

**STEP 11** Remove the protective drape.

**STEP 12** Remove HMAC and immediately disinfect per Infection Control Standard Operating Procedure (see back side of this sheet for details).

*Approved drapes: Steri-Drape Surgical Drape (Adhesive Towel Drape)*
- 75cm x 75cm – Ref: 9084
- 17in x 23in – Ref: 1185
- 15in x 26in – Ref: 7157
Cleaning Instructions
Immediately after using the HMAC, perform the steps below for disinfection.

**STEP 1** Perform hand hygiene and put on clean gloves.

**STEP 2** Remove the air hose from the side of the box.

**STEP 3** Wipe the exterior of the vacuum and the hose with hospital-approved disinfecting wipes (i.e. PDI red top or purple top). Note: Do not remove the hose from the vacuum. Dispose of the wipe(s).

**STEP 4** With a new wipe, disinfect the inside of the nozzle of the air hose where it was connected to the HMAC.

**STEP 5** Allow the vacuum air hose to dry.

**STEP 6** Inspect the HMAC for any gross contamination. If gross contamination is observed, use the two-step cleaning process to properly disinfect the HMAC.
   a. Remove any gross contamination with a dry paper towel or disinfecting wipes.
   b. Inspect the device for any remaining gross contamination. Continue removing contamination until there is no visible contamination remaining.
   c. Once all visible contamination has been removed, continue to step 7.

**STEP 7** Disinfect the interior of the box with disinfecting wipes.

**STEP 8** Remove gloves used for disinfection, perform hand hygiene and put on new gloves.

**STEP 9** With clean wipes, disinfect the exterior of the box.

**STEP 10** Place the air hose of the vacuum in a clean plastic bag. (Note: Ensure that the air hose has not been disconnected from the vacuum).

**STEP 11** Store the HMAC and the vacuum in a clean area and make ready for the next procedure.