

Minimizing aerosolization and resource management of albuterol metered dose inhalers (MDIs)

Situation
<ul style="list-style-type: none">- FMOLHS will begin efforts to reserve albuterol MDIs for FMOLHS locations treating active or suspected COVID-19 patients.
Background
<ul style="list-style-type: none">- Suspected or known COVID-19 patients often present with respiratory distress requiring the use of short-term beta-agonists such as albuterol for symptom management.- Use of nebulized albuterol via hand-held nebulizer or nebulizer mask increases the risk of aerosolization of the COVID-19 virus and requires a change in the patients' care from droplet precautions to airborne precautions.- Use of albuterol MDIs allows these patients to remain on droplet precautions.
Assessment
<ul style="list-style-type: none">- Resource allocation along with patient and provider safety remain a top priority.- The use of nebulized albuterol in patients with known or suspected COVID-19 also necessitates the use of additional limited resources including N95 masks and other PPE that is required when taking care of patients under airborne precautions.- There is a limited availability of albuterol MDIs throughout the health-system and its use should be prioritized for the COVID-19 patient population.
Recommendations
<ul style="list-style-type: none">- In an effort to conserve albuterol MDIs, N95 masks and PPE:<ul style="list-style-type: none">○ Patients in COVID- 19 rule out or COVID-19 treatment areas (FMOLHS free-standing ERs, FMOLHS urgent cares centers, and other COVID-19 designated areas within FMOLHS hospitals) should use albuterol MDIs as a first line agent.<ul style="list-style-type: none">▪ Providers in these settings should prioritize albuterol MDI use for patients with symptoms of active wheezing/bronchospasm.○ If pharmacy identifies a patient in a COVID-19 rule out or treatment area in whom nebulized albuterol is ordered, they will work with the provider and respiratory therapy to provide MDI recommendations.○ For patients NOT in COVID-19 rule out/treatment areas, providers should consider the use of nebulized albuterol for symptom management as first line. If supply permits, albuterol MDIs will be made available only when necessary. Long acting beta agonist MDIs for <u>non-asthmatics</u> may be trialed in these otherwise noncritical locations.
Additional Considerations
<ul style="list-style-type: none">- The use of multi-dose medications that can be used for multiple patients (ex. insulin) should be used with caution in areas not actively treating rule-out/known COVID-19 patients.- Additionally, these medications should not be used in areas treating rule-out/known COVID-19 patients.