Inhaled Isopropyl Alcohol in the Emergency Department

A non-invasive therapy for the management of nausea and vomiting

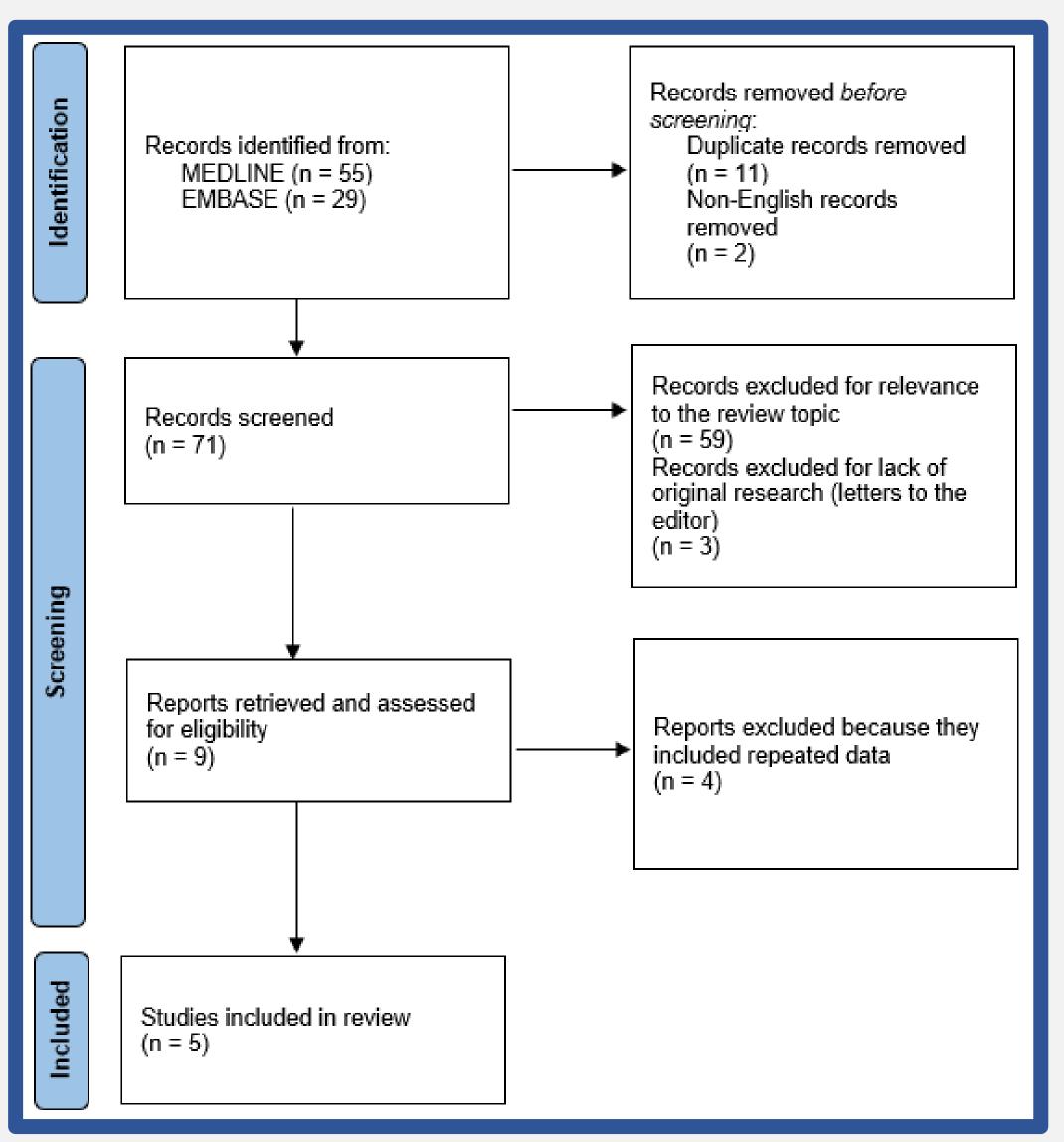
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INTRODUCTION

- Nausea and vomiting are common emergency department (ED) symptoms
- Current therapies are expensive, have well documented adverse effects, and often require IV access if patients are actively vomiting
- Inhaled isopropyl alcohol is an effective antiemetic therapy in the post-operative setting with no significant adverse events
- There is a growing body of evidence for its use in the ED

METHODS



RESULTS

Is isopropyl alcohol an effective antiemetic?



Four RCTs have shown that inhaled isopropyl alcohol is an effective antiemetic with superior symptomatic relief compared to both placebo and ondansetron with no significant adverse events

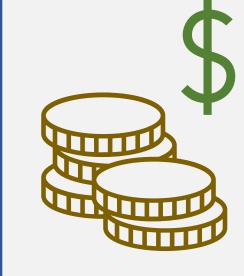
Are there other benefits to using inhaled isopropyl alcohol?

An implementation study using inhaled isopropyl alcohol as a nurse-initiated antiemetic therapy at the ED triage desk found the following:



More patients received symptomatic treatment (66% vs 97%) more quickly (7 minutes vs 1 minute)





Patients required fewer alternative antiemetic treatments, resulting in a decreased cost per patient visit by 50% (\$2 CAD to \$1 CAD)







A survey of nurses showed that they found inhaled isopropyl alcohol to be quick and easy to administer

CONCLUSIONS

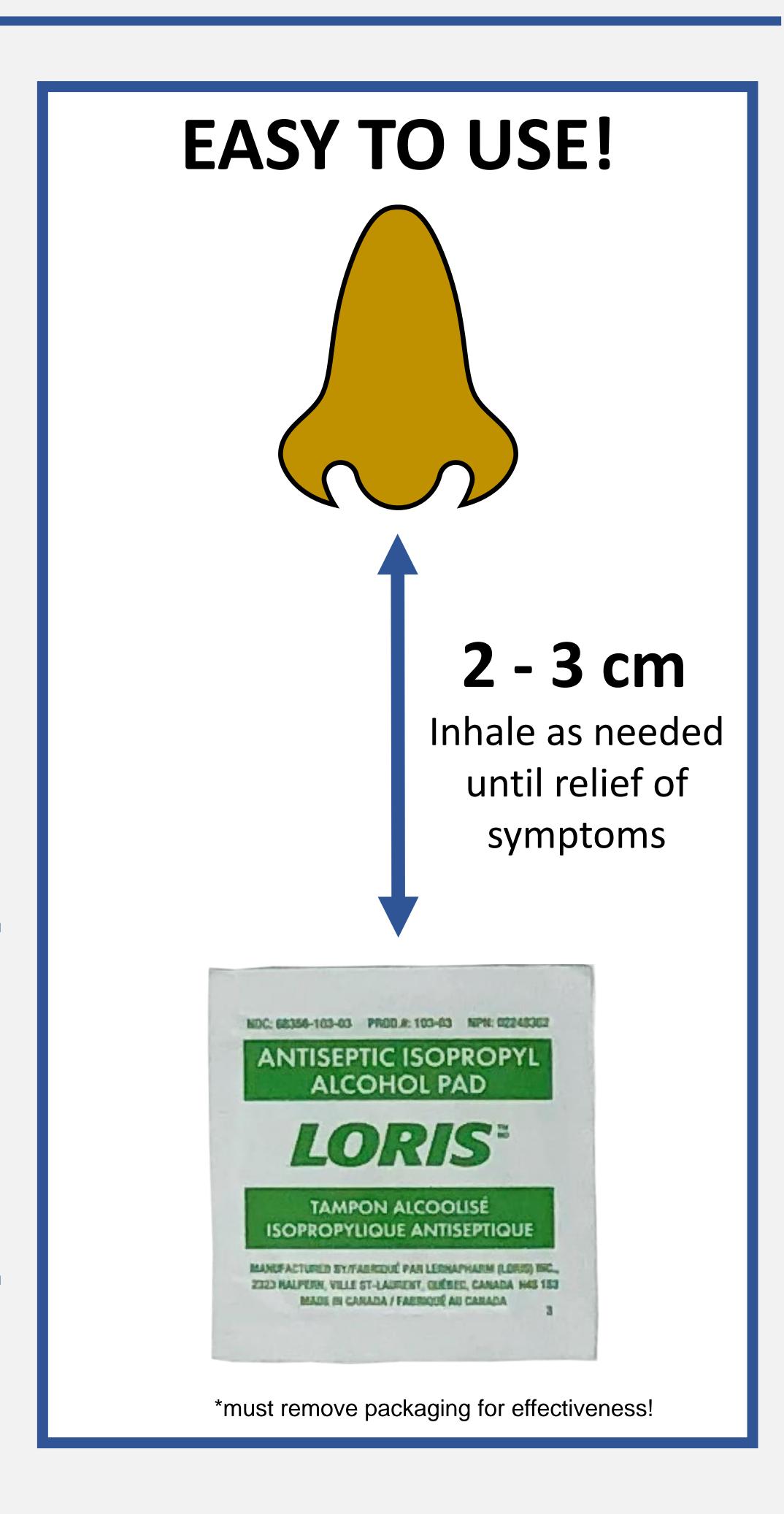
- Isopropyl alcohol is a safe and effective antiemetic for use in the ED
- Isopropyl alcohol is inexpensive and can reduce healthcare costs in the treatment of nausea and vomiting
- Use of isopropyl alcohol can increase the number of patients receiving symptomatic treatment in a shorter period of time
- Isopropyl alcohol should be strongly considered for implementation as nurseinitiated therapy at the triage desk in all emergency departments

LIMITATIONS

- Small studies but robust methodology
- Not studied in specific populations notably, pediatric and pregnant populations

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