Portable or Temporary Negative Pressure Rooms for Tuberculosis: Clinical Effectiveness and Guidelines
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About CADTH: CADTH is an independent, not-for-profit organization responsible for providing Canada’s health care decision-makers with objective evidence to help make informed decisions about the optimal use of drugs, medical devices, diagnostics, and procedures in our health care system.

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Questions or requests for information about this report can be directed to requests@cadth.ca
Research Questions

1. What is the clinical effectiveness of portable or temporary negative pressure rooms for the management of people with active tuberculosis?

2. What are the evidence-based guidelines regarding the use of portable or temporary negative pressure rooms for the management of people with active tuberculosis?

Key Findings

No relevant studies were identified regarding the clinical effectiveness of portable or temporary negative pressure rooms for the management of people with active tuberculosis. In addition, no relevant evidence-based guidelines were identified regarding the use of portable or temporary negative pressure rooms for the management of people with active tuberculosis.

Methods

A limited literature search was conducted by an information specialist on key resources including Medline via Ovid, PubMed, the Cochrane Library, the University of York Centre for Reviews and Dissemination (CRD) databases, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy was comprised of both controlled vocabulary, such as the National Library of Medicine’s MeSH (Medical Subject Headings), and keywords. The main search concepts were negative pressure rooms and tuberculosis, COVID-19, and other respiratory illnesses. No filters were applied to limit the retrieval by study type. The search was also limited to English language documents published between Jan 1, 2010 and Apr 16, 2020. Internet links were provided, where available.

This report is a component of a larger CADTH Condition Level Review on TB. A condition level review is an assessment that incorporates all aspects of a condition, from prevention, detection, treatment, and management. For more information on CADTH’s Condition Level Review of TB, please visit the project page (https://www.cadth.ca/tuberculosis).

Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.
Table 1: Selection Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>People with active tuberculosis infection</th>
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<tr>
<td>Intervention</td>
<td>Portable or temporary negative pressure rooms (e.g., conversion of a hospital room using filtration equipment, standalone equipment that surrounds the patient used within an existing room, temporary negative pressure rooms or units used outside of the hospital)</td>
</tr>
<tr>
<td>Comparator</td>
<td>Standard dedicated negative pressure hospital rooms; No negative pressure room</td>
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<tr>
<td>Outcomes</td>
<td>Q1: Clinical effectiveness (e.g., prevention of disease transmission), ease of use Q2: Recommendations regarding when and how portable or temporary equipment, or should, be used</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies, and evidence-based guidelines</td>
</tr>
</tbody>
</table>

Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports and systematic reviews are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

No relevant studies were identified regarding the clinical effectiveness of portable or temporary negative pressure rooms for the management of people with active tuberculosis. In addition, no relevant evidence-based guidelines were identified regarding the use of portable or temporary negative pressure rooms for the management of people with active tuberculosis.

References of potential interest are provided in the appendix.

Overall Summary of Findings

No relevant clinical evidence or evidence-based guidelines were identified regarding portable or temporary negative pressure rooms for the management of people with active tuberculosis, therefore no summary can be provided.

References Summarized

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-Analyses

No literature identified.

Randomized Controlled Trials

No literature identified.

Non-Randomized Studies

No literature identified.
Guidelines and Recommendations

No literature identified.
Appendix — Further Information

Non-Randomized Studies — Laboratory-Based Outcomes


Guidelines and Recommendations

Alternative Condition — COVID-19


Clinical Practice Guidelines


Alternative Condition — COVID-19


Additional References


Alternative Condition — COVID-19

https://www.fda.gov/media/136533/download