CADTH RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS

Protective Eyewear for Health Care Workers: 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.

Funding: CADTH receives funding from Canada’s federal, provincial, and territorial governments, with the exception of Quebec.

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

1. What is the clinical effectiveness of protective eyewear for health care workers caring for patients with suspected or confirmed respiratory tract infections?

2. What are the evidence-based guidelines regarding the use of protective eyewear by health care workers caring for patients with suspected or confirmed respiratory tract infections?

Key Findings

No relevant literature was identified regarding the clinical effectiveness of protective eyewear for health care workers caring for patients with suspected or confirmed respiratory tract infections. Additionally, no evidence-based guidelines were identified regarding the use of protective eyewear by health care workers caring for patients with suspected or confirmed respiratory tract infections.

Methods

Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including MEDLINE, 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 eye protection and healthcare workers caring for patients with suspected or confirmed respiratory tract infections. Methodological filters were not used to limit the search. The search was limited to English language documents published between Jan 1, 2010 and Aug 31, 2020. Internet links were provided, where available.

Selection Criteria and Summary Methods

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Full texts of study publications were not reviewed. The Overall Summary of Findings was based on information available in the abstracts of selected publications. Open access full-text versions of evidence-based guidelines were reviewed when abstracts were not available, and relevant recommendations were summarized.

Table 1: Selection Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>Intervention</th>
<th>Comparator</th>
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| Health care workers caring for patients with suspected or confirmed respiratory tract infections (e.g., coronavirus disease, influenza) | Protective eyewear (e.g., safety glasses, face shields, goggles) | Q1: Alternative protective eyewear  
Q2: Not applicable |
Outcomes

<table>
<thead>
<tr>
<th>Study Designs</th>
<th>Q1: Clinical effectiveness (e.g., risk of transmission)</th>
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<tr>
<td></td>
<td>Q2: Recommendations regarding best practices (e.g., guidance related to the selection of protective eyewear in various clinical scenarios, information relating to the cleansing of protective eyewear)</td>
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<td>Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies, evidence-based guidelines</td>
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Results

No relevant health technology assessments, systematic reviews, randomized controlled trials, or non-randomized studies were identified regarding the clinical effectiveness of protective eyewear for health care workers caring for patients with suspected or confirmed respiratory tract infections. Additionally, no evidence-based guidelines were identified regarding the use of protective eyewear by health care workers caring for patients with suspected or confirmed respiratory tract infections.

References of potential interest that did not meet the inclusion criteria are provided in the appendix.

Overall Summary of Findings

No relevant literature was found regarding the clinical effectiveness of protective eyewear for health care workers caring for patients with suspected or confirmed respiratory tract infections. Additionally, no evidence-based guidelines were identified regarding the use of protective eyewear by health care workers caring for patients with suspected or confirmed respiratory tract infections; 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

Previous CADTH Report


Systematic Review and Meta-Analysis – Unclear Population


Non-Randomized Study – No Comparator


Guidelines and Recommendations – Unclear Methodology


See: Recommended Use of Personal Protective Equipment – Eye protection (p. 17)

See: 2. Recommended infection prevention and control (IPC) practices when caring for a patient with suspected or confirmed SARS-CoV-2 infection - Eye Protection

See: Eye protection (p. 13-14)

See: Occupational Health & Safety - Personal Protective Equipment (PPE) (p. 7-8)

See: Occupational Health & Safety - Personal Protective Equipment (PPE):25 (p. 8-9)

See: Appendix H: Eye Protection, Surgical/Procedural Masks & Gloves (p. 28)

See: Eye or face protection (including full-face visors) must: (p. 17)
See: o) Use 3D-printed face shields for eye protection (p. 14); t) Decontaminate PPE using validated sterilization and disinfection methods (p. 14)

See: Masking/eye protection for all staff providing or participating in patient care for duration of shifts

See: Personal protective equipment (PPE)

See: 2. Ensure rationale and appropriate use of PPE (p. 3)

See: Table 1. Recommended personal PPE during the outbreak of COVID-19 outbreak, according to the setting, personnel, and type of activity (p. 3 – 5)

Additional Reference