

CADTH RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS

Protective Eyewear for Health Care Workers: Clinical Effectiveness and Guidelines

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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

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

Outcomes	Q1: Clinical effectiveness (e.g., risk of transmission) 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)
Study Designs	Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies, evidence-based guidelines

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

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Systematic Review and Meta-Analysis – Unclear Population

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Non-Randomized Study – No Comparator

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Guidelines and Recommendations – Unclear Methodology

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9. Centers for Disease Control and Prevention. Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 (COVID-19) Pandemic; 2020 Jul 15.
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html> Accessed 2020 Sep 8.
See: 2. Recommended infection prevention and control (IPC) practices when caring for a patient with suspected or confirmed SARS-CoV-2 infection - Eye Protection
10. Health and Safety Executive. Rapid evidence review. Part one: Equivalence of N95 and FFP2 masks Part two: Aprons, Gowns and eye protection; 2020 Mar.
<https://www.hse.gov.uk/coronavirus/assets/docs/face-mask-equivalence-aprons-gown-eye-protection.pdf> Accessed 2020 Sep 8.
See: Eye protection (p. 13-14)
11. Ministry of Health Ontario. COVID-19 Guidance: Acute Care; 2020 Jun.
http://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/2019_acute_care_guidance.pdf Accessed 2020 Sep 8.
See: Occupational Health & Safety - Personal Protective Equipment (PPE) (p. 7-8)
12. Ministry of Health Ontario. COVID-19 Guidance: Primary Care Providers in a Community Setting; 2020 May.
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Additional Reference

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