

**Evidence-Based Practice Group Answers to Clinical  
Questions**

**“Efficacy and/or Effectiveness of an  
Orthopaedic Mattress in Aiding Post-  
Discectomy Recovery”**

**A Rapid Systematic Review**

By

**WorkSafeBC Evidence-Based Practice Group**

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## About this report

# Efficacy and/or Effectiveness of an Orthopaedic Mattress in Aiding Post-Discectomy Recovery

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### About the Evidence-Based Practice Group

The Evidence-Based Practice Group was established to address the many medical and policy issues that WorkSafeBC officers deal with on a regular basis. Members apply established techniques of critical appraisal and evidence-based review of topics solicited from both WorkSafeBC staff and other interested parties such as surgeons, medical specialists, and rehabilitation providers.

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## Objective

To determine whether there is evidence to support the efficacy and/or effectiveness of the use of an orthopaedic mattress in aiding surgical recovery, especially for post-discectomy patients.

## Methods

- A comprehensive literature search was done on July 24, 2018.
- The search was done on commercial medical literature databases, including Cochrane Database of Systematic Reviews® (2005 to July 18, 2018), ACP Journal Club® (1991 to June 2018), Database of Abstracts of Reviews of Effects® (1st Quarter 2016), Cochrane Clinical Answers® (June 2018), Cochrane Central Register of Controlled Trials® (June 2018), UK NHS Health Technology Assessment® (4th Quarter 2016), UK NHS Economic Evaluation Database® (1st Quarter 2016), BIOSIS Previews® (1969 to 2008), Embase® (1974 to 2018 July 23), Medline Epub Ahead of Print®, Medline In-Process & Other Non-Indexed Citations®, Medline Daily®, and Medline® (1946 to July 23, 2018), that are available through Ovid® platform.
- These searches were done by employing combinations of keywords, as follows:
  1. ((orthopedic **ADJ** mattress\$) **OR** (orthopedic **ADJ** bed\$) **OR** (orthopaedic **ADJ** mattress\$) **OR** (orthopaedic **ADJ** bed\$)) **AND** (recovery **OR** surgery **OR** (surgical **ADJ** recovery) **OR** (post **ADJ** discectomy))
  2. ((orthopedic **ADJ** mattress\$) **OR** (orthopedic **ADJ** bed\$) **OR** (orthopaedic **ADJ** mattress\$) **OR** (orthopaedic **ADJ** bed\$))
- No limitations, such as on the language or date of publication, were implemented in any of these searches.

## Results

### Search results:

- Seven<sup>(4,7,11,13,18,21,24)</sup> published studies were identified from Search No. 1. Upon review of the titles and abstracts, none of these seven<sup>(4,7,11,13,18,21,24)</sup> studies were deemed relevant to the objective of this systematic review.
- Twenty-five<sup>(1-25)</sup> published studies were identified from Search No. 2. Upon review of the titles and abstracts of these 25<sup>(1-25)</sup> studies, it was determined that none of them were relevant to the objective of this systematic review.

## Summary

- At present, there is no published evidence to support (or to refute) the use of an orthopaedic mattress for the purpose of improving surgical recovery, particularly among post-discectomy patients.

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## Appendix 1

### WorkSafeBC - Evidence-Based Practice Group Levels of Evidence

(adapted from 1,2,3,4)

1	Evidence from at least 1 properly randomized controlled trial (RCT) or systematic review of RCTs.
2	Evidence from well-designed controlled trials without randomization or systematic reviews of observational studies.
3	Evidence from well-designed cohort or case-control analytic studies, preferably from more than 1 centre or research group.
4	Evidence from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled
5	Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees.

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