

The Development of Physical Activity Guidelines for Adults with SCI

Purpose

To develop physical activity guidelines for people with spinal cord injury with the goal of improving physical fitness

Summary

- The guidelines were developed by an expert panel consisting of exercise physiologists, health & exercise psychologists, exercise rehabilitation researchers, medical doctors (cardiology, physiatry), SCI consumers, SCI physical education specialists, clinicians, and knowledge translation specialists
- An extensive review of existing research found that exercise improved muscular strength and physical capacity among people with SCI
- To achieve these benefits, the following guidelines were created by the expert panel for adults with SCI:
 - 20 minutes of moderate to heavy intensity aerobic activity 2x/week
 - strength training 2x/week consisting of three sets of 8-10 repetitions of each exercise, targeting major muscle groups

Possible Applications

- With the guidelines in hand, SCI consumers could have information on what kinds of exercises, how often, how much, how hard, and how to exercise
- Clinicians, doctors, and service providers could confidently prescribe and provide exercise to people with SCI

Research Abstract

The development of evidence-informed physical activity guidelines for adults with spinal cord injury

Objectives: To systematically develop evidence-informed physical activity guidelines to improve fitness in people with spinal cord injury (SCI).

Methods: The Appraisal of Guidelines, Research and Evaluation II guideline development protocol was used to develop exercise guidelines to improve physical capacity and muscular strength. The evidence base for the guideline development process consisted of a systematic review and quality appraisal of research examining the effects of exercise on physical fitness among people with SCI. A multidisciplinary expert panel deliberated the evidence and generated the guidelines. Pilot testing led to refinement of the wording and presentation of the guidelines.

Results: The expert panel generated the following guidelines: for important fitness benefits, adults with SCI should engage in (a) at least 20 minutes of moderate to vigorous intensity aerobic activity two times per week and (b) strength training exercises two times per week, consisting of three sets of 8-10 repetitions of each exercise for each major muscle group.

Conclusions: People with SCI, clinicians, researchers and fitness programmers are encouraged to adopt these rigorously developed guidelines.

Martin Ginis KA, Hicks AL, Latimer AE, Warburton DER, Bourne C, Ditor DS, Goodwin DL, Hayes KC, McCartney N, McIlraith A, Pomerleau P, Smith K, Stone JA, Wolfe DL (2011). The development of evidence-informed physical activity guidelines for adults with spinal cord injury. *Spinal Cord*, advance online publication, June 7, 2011; doi:10.1038/sc.2011.63