

# LOW BACK INJURIES

PROGRAM OF CARE 4TH EDITION 2014



# Acknowledgements

---

The WSIB would like to acknowledge the significant contributions of the following regulated Health Professional Associations and stakeholder representatives in the development of the Low Back Injuries Program of Care.

- ▶ Employer’s Coalitions of Ontario
- ▶ Ontario Association of Speech-Language Pathologists and Audiologists
- ▶ Ontario Chiropractic Association
- ▶ Ontario Medical Association
- ▶ Ontario Pharmacists’ Association
- ▶ Ontario Physiotherapy Association
- ▶ Ontario Psychological Association
- ▶ Ontario Society of Occupational Therapists
- ▶ Registered Massage Therapists’ Association of Ontario
- ▶ Registered Nurses Association of Ontario
- ▶ United Steelworkers of America

**Health Care Practitioner Access Line:  
1-800-569-7919 or (416) 344-4526**

**Please call the Health Care Practitioner Access Line  
if you have any questions about the Program of Care.  
Hours: Monday to Friday, 9:00 a.m. to 4:00 p.m.**



# Table of Contents

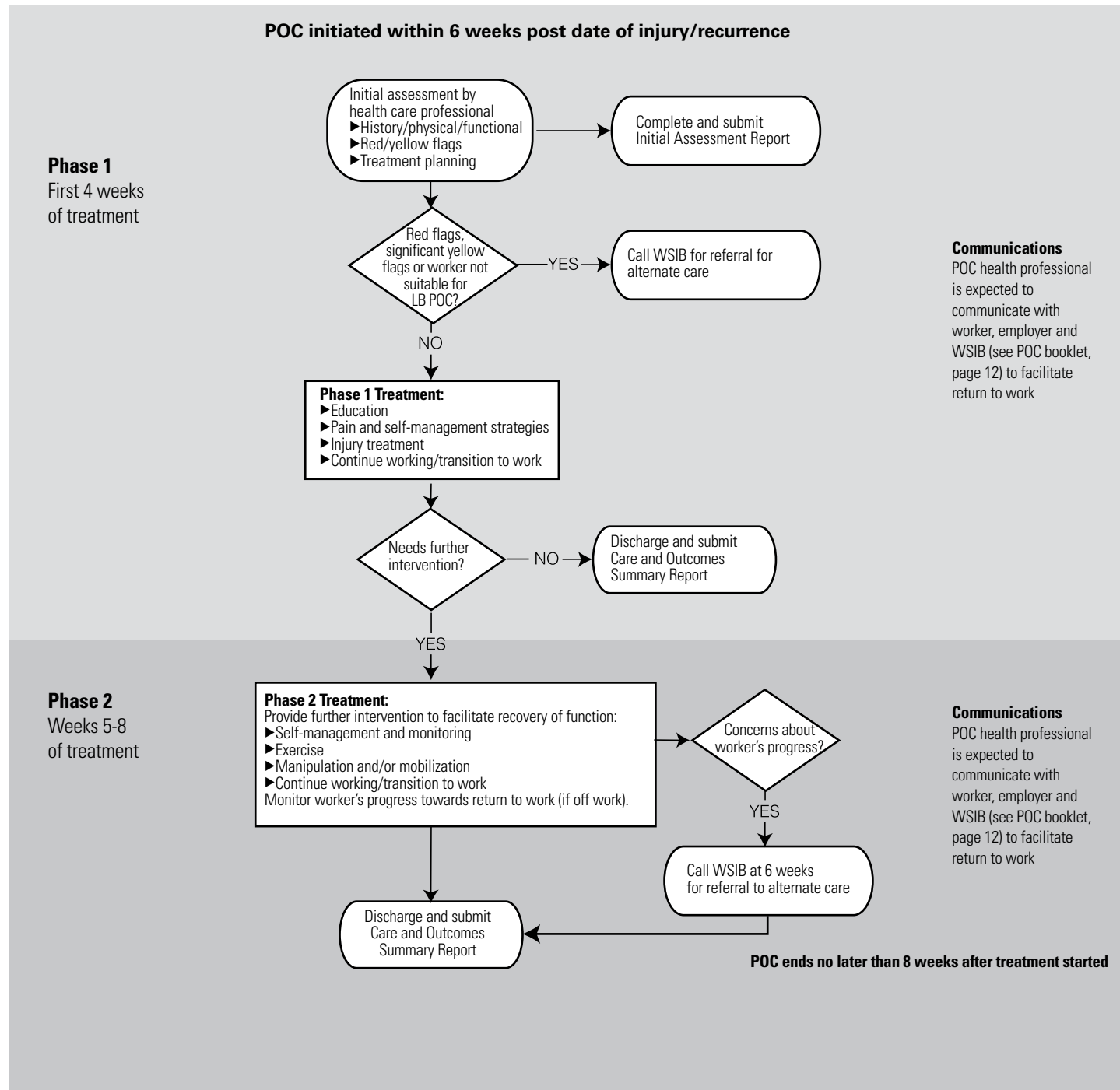
---

<b>Low Back Injuries Program of Care Algorithm</b> .....	<b>4</b>
<b>Introduction</b> .....	<b>5</b>
<b>Grade of Recommendation</b> .....	<b>5</b>
<b>Program Objectives</b> .....	<b>6</b>
<b>Admission Criteria</b> .....	<b>6</b>
<b>Reporting Injury Status and Recovery</b> .....	<b>6</b>
<b>Program of Care: Phase 1</b> .....	<b>7</b>
Initial Assessment .....	7
Outcome Measurement Tools .....	7
Components of Program for Phase 1 .....	8
Care & Outcomes Summary .....	9
<b>Program of Care: Phase 2</b> .....	<b>10</b>
Components of Program for Phase 2 .....	10
Care & Outcomes Summary .....	11
<b>Communication Requirements</b> .....	<b>12</b>
<b>References</b> .....	<b>13</b>

ALGORITHM

# Low Back Injuries Program of Care (LB POC)

Program of Care delivery from initial assessment to discharge.



# Introduction

This reference guide is intended for regulated health care professionals who, within their scope of practice, can deliver the Low Back Injuries Program of Care. The purpose of this guide is to inform regulated health care professionals about the objectives of the Program of Care and the details of the treatment program.

The Low Back Injuries Program of Care is an evidence-based health care delivery plan, based on a systematic review of the scientific literature. This Program of Care is specific to the treatment of workers with an acute low back injury for a period of up to 8 weeks from the date of first assessment/ treatment.

This 4th edition of the reference guide reflects an update to the name of the program, now the Low Back Injuries Program of Care and does not change the recommended interventions.

The interventions have been classified as “recommended” or “not recommended” for use in this Program of Care based on the quality of available evidence of their efficacy as described below.

GRADE OF RECOMMENDATION*		
Grade	Level of Evidence	Interpretation
<b>A ✓</b>	Multiple RCTs/CCTs with consistent findings	Good evidence to support the recommendation that the intervention be included in a Program of Care
<b>A ✗</b>	Multiple RCTs/CCTs with consistent findings	Good evidence to support the recommendation that the intervention be excluded from a Program of Care
<b>B ✓</b>	Single RCT/CCT with conclusive findings	Fair evidence to support the recommendation that the intervention be included in a Program of Care
<b>B ✗</b>	Single RCT/CCT with conclusive findings	Fair evidence to support the recommendation that the intervention be excluded from a Program of Care
<b>C</b>	RCT/CCT with inclusive findings	Poor evidence regarding inclusion or exclusion of the intervention in a Program of Care, but should be considered for inclusion/exclusion on other grounds
<b>D</b>	Multiple RCTs/CCTs with inconsistent findings	Inconsistent evidence to support inclusion or exclusion of the intervention in a Program of Care, but should be considered for inclusion/exclusion on other grounds
<b>E</b>	No Cochrane review, RCT or CCT found	There is no evidence, as defined by RCTs (with untreated control group), to support the inclusion or exclusion of the intervention in a Program of Care, but should be considered for inclusion/exclusion on other grounds

\* (Canadian Task Force on the Periodic Health Examination, 1979)

## Program Objectives

---

The objectives of the Low Back Injuries Program of Care are to:

- ▶ Facilitate safe, early and sustained return to work for workers in the program
- ▶ Reduce chronicity of low back injuries
- ▶ Assist workers to return to pre-injury level of overall function and quality of life
- ▶ Increase satisfaction with quality of care among workers and other stakeholders.

## Admission Criteria

---

The Program of Care is for workers:

- ▶ With an acute low back injury (up to 6 weeks from date of injury/recurrence)
- ▶ Who may also have another injury that does not preclude the worker from participating in this Program of Care
- ▶ Assessed within the first 42 days from date of injury and/or recurrence\*
- ▶ With no clinical evidence of red flags
- ▶ Still at work (regular or modified) or off work
- ▶ Not hospitalized.

If the health care professional determines that a worker is not suitable for the Program of Care, the health professional must contact the WSIB.

### WSIB Clinical Expert Line

(416) 344-5739 or toll free 1-866-716-1299

---

\* Refer to the WSIB Operational Policy Manual for information about recurrences ([www.wsib.on.ca](http://www.wsib.on.ca))

## Reporting

---

Reporting requirements of the worker's progress and outcomes include:

- ▶ Initial Assessment Report – information to enable treatment planning and return to work planning.
- ▶ Care & Outcomes Summary – a summary of the worker's improved function; return to work information.

---

**NOTE:** Complete the Low Back Injuries Program of Care Initial Assessment report only. The Health Professional's report ( Form 8) is also not required.

# Program of Care: Phase 1 (Weeks 1-4)

## Initial Assessment

An initial assessment is completed at the worker's first contact with the health care professional. The health care professional will communicate the key findings of the initial assessment (including red and yellow flags) and treatment plan with specifics on the expected frequency and duration of the treatment program. The health care professional should send the Initial Assessment report to WSIB within 2 working days.

Assessment practice varies among health care professionals and other assessment components may be included. The Initial Assessment for the Program of Care must include the following elements:

- ▶ History and subjective evaluation,
- ▶ Physical and functional examination and objective evaluation.

The objectives of the Initial Assessments are to:

### 1. Rule Out Red Flags

Positive findings on the following conditions have been termed "red flags" (Waddell, McIntosh, Hutchinson, Feder & Lewis, 1999) and indicate that a worker may be clinically inappropriate for the Program of Care.

#### **Red flags:**

- ▶ **Neurological deficit:** major motor weakness, disturbance of bowel or bladder control
- ▶ **Infection:** fever, urinary tract infection (UTI), intravenous (IV) drug use, immune suppression
- ▶ **Fracture:** significant trauma
- ▶ **Tumour:** history of cancer, weight loss, fever, pain worse when supine or at night

In the absence of red flags, imaging examination and laboratory tests are typically not indicated in the initial phase following low back injury.

**NOTE:** Non-spinal pathology can include vascular, abdominal, urinary or pelvic etiologies. Particular care should be taken with workers less than 20 or greater than 50 years of age who have red flags.

## 2. Identify Yellow Flags

Yellow flags indicate psychological risk factors that may have an impact on behaviour, expectations and recovery from back injury (Kendall, Linton & Main, 1997). The purpose of assessing for yellow flags is to identify the worker who is at potentially greater risk for chronicity and to ensure appropriate monitoring and intervention during the Program of Care.

#### **Yellow flags:**

- ▶ Believes hurt equals harm
- ▶ Fears/avoids activity
- ▶ Low mood/social withdrawal
- ▶ Prefers passive treatments
- ▶ Home environment concerns
- ▶ Work environment concerns

## Outcome Measurement Tools

At the time of the initial assessment and discharge, the health care professional will use the following measurement tools: Numeric Pain Rating Scale and Roland-Morris Disability Questionnaire. These measurement tools are available on the WSIB web site ([www.wsib.on.ca](http://www.wsib.on.ca)).

# Program of Care: Phase 1 (Weeks 1-4)

## Components of Program of Care: Phase 1 (up to 6 weeks from date of injury/ recurrence)

Education and management interventions during this phase are focussed on a gradual increase in usual activity and function with support from and monitoring by the health care professional.

### Education

Explain nature of soft tissue injury; provide reassurance about pain; activity management and participation; explain expected positive course of recovery; provide education and reassurance that imaging and laboratory tests are not necessary at this time.

### Pain and Self-management Strategies

Promote self-mobilization and progression of activity at home and at work; recommend against prolonged or total bed-rest; emphasize recovery and restoration of function, participation in exercise with gradual increase in usual activity and occupational tasks.

### Injury Treatment

Provide instruction and supervision of exercises, spinal manipulation and/or mobilization as indicated by assessment findings.

### Progressive Pain Management Steps

- ▶ Begin with reassurance. Make every effort to remove fear, anxiety and apprehension concerning low back injury. Promote self management strategies and progression of activities.
- ▶ Recommend self-application of heat and/or ice for symptomatic relief of pain (workers may require instruction) as appropriate.
- ▶ Provide manipulation and/or mobilization as clinically appropriate.

- ▶ Suggest as an option the use of non-prescription analgesics and non-steroidal anti-inflammatory drugs (NSAIDs). These can be used as a temporary palliative measure in conjunction with other pain relief interventions. While drug therapy is beyond the scope of the literature reviewed for this Program of Care, this advice to workers is consistent with Royal College of General Practitioners (Waddell et al., 1999) and (Bigos et al., 1994).

### Transition to Work (regular or modified)

Transition to work is part of the worker's rehabilitation. This may involve decreased contact with the health care professional and increased time at work. Pain and self-management strategies may also need to increase as the worker returns to work. This may require contact between the health care professional, the workplace, and the WSIB.

### Interventions not recommended

There is a lack of evidence in the literature that the following interventions are effective for the treatment of acute low back injuries in Phase 1.

- ▶ Acupuncture
- ▶ Prolonged/total bed-rest
- ▶ Bio-feedback (neuromuscular re-education)
- ▶ Electrical stimulation
- ▶ Flexion exercises (as a specific regimen)
- ▶ Magnet therapy
- ▶ Mechanical traction
- ▶ Ultrasound.

These may be used if, in your clinical judgement, they are in the best interest of your patient. These services may not be billed.



# Program of Care: Phase 1 (Weeks 1-4)

---

## Addressing Yellow Flag Issues

To address issues regarding yellow flags:

- ▶ Provide a regular review of the patient's progress
- ▶ Acknowledge any difficulties he/she has in maintaining activities of daily living and in resuming work and be encouraging and helpful
- ▶ Maintain positive co-operation between the worker and his/her employer
- ▶ Explain that more time off work will reduce the likelihood of successful return to work
- ▶ Promote self-management and self-responsibility
- ▶ Provide positive feedback.

## Frequency of Contact and Duration of Treatment

The Program of Care should be administered according to the health care professional's clinical judgement of the worker's need. The type and frequency of care may vary among workers. A minimum of 3 visits must be provided within the first 4 weeks of the program. The frequency and treatment duration should decrease as the worker progresses and the expected natural recovery occurs.

**NOTE:** Frequency and duration of treatment must be carefully balanced with the suggestion in guidelines about the benefits of limiting formal interaction with health care professionals and increasing the worker's self-reliance during that period (the first 4 weeks).

## Care & Outcomes Summary

The Care & Outcomes Summary should be completed **whenever** the worker is discharged from the Program of Care. The Summary will include the level of participation in the Program of Care, treatment progress, the worker's functional abilities, his/her work status and any further recommendations.

# Program of Care: Phase 2 (Weeks 5-8)

## Overview

Workers continuing into Phase 2 may be at work (regular or modified) and in need of some supervision or monitoring, or may remain off work. Phase 2 includes a structured program of more intensive treatment and may also require more than one health care professional. The severity of the low back injury, response to treatment and recovery pattern will affect the intensity, frequency and duration of treatment. The manner in which exercise is carried out may vary – it may take place in the home or in an exercise program delivered within a rehabilitation environment or workplace.

Those who have returned to work may still require a progressive exercise program aimed at improving strength, endurance and general fitness – particularly to assist in the transition from modified to regular work. Not all workers will require a supervised exercise program conducted in a rehabilitation environment. Many factors will affect how and where exercise will take place, including the worker's past experience with exercise, and overall awareness of exercise and fitness.

## Components of Phase 2 (Weeks 5-8)

### Exercise

Phase 2 consists of a graduated, structured, quota-based program focusing on strength, flexibility and general fitness, and aimed at improving the ability to perform physical job functions. Exercise and postures assumed both at home and at work is included.

### Manipulation and/or Mobilization

Manipulation and/or mobilization may be introduced and/or continued in Phase 2 when there is clear evidence of subjective and objective improvement in response to this treatment. Manipulation and/or mobilization is not recommended as a standalone treatment.

### Transition to Work (regular or modified)

Workers should be moved towards a safe transition to work as early as possible. This will require contact between the workplace and health care professional. Health care professionals are encouraged to initiate and maintain positive co-operation and communication with the employer and the WSIB in the development of return to work strategies. Self-management strategies may need to increase as the worker moves back into the workplace.

### Addressing Yellow Flags

Yellow flags should be addressed and monitored throughout Phase 2 of the program. Please refer to page 7.

### Frequency/Duration and Program Length (up to 4 weeks)

Phase 2 should be administered according to the health care professional's clinical judgement of the worker's need, with particular modification based on work status. It is expected that both the frequency and duration of intervention should decrease as recovery occurs and that the health care professionals strive to continue to transition the worker safely towards return to regular or modified work.

### Interventions not recommended

There is a lack of evidence in the literature that the following interventions are effective for the treatment of an acute low back injury in Phase 2.

- ▶ Acupuncture
- ▶ Prolonged/total bed-rest
- ▶ Bio-feedback (neuromuscular re-education)
- ▶ Electrical stimulation
- ▶ Magnet therapy

## Program of Care: Phase 2 (Weeks 5-8)

---

- ▶ Mechanical traction
- ▶ Transcutaneous electrical nerve stimulation (TENS)
- ▶ Ultrasound
- ▶ Underwater traction and underwater massage (hydrotherapy).

These may be used if, in your clinical judgement, they are in the best interest of your patient. These services may not be billed.

### Care & Outcomes Summary

The Care & Outcomes Summary should be completed **whenever** the worker is discharged from the Program of Care. The Care & Outcomes Summary will include the level of participation in the Program of Care, treatment progress, the worker's functional abilities, his/her work status and any further recommendations.

# Communication Requirements

---

Timely and effective communication is an important element in the success of the Program of Care. Communication includes written reports, telephone conversations and discussions with workers. The frequency of communication will vary from case to case depending on the individual circumstances of the worker and the extent of progress achieved. There are, however, some key communications and reporting requirements at various times during the Program of Care.

Communication occurring among participants during the recovery and return to work process may include:

- ▶ Worker
- ▶ Health care professional
- ▶ Employer
- ▶ WSIB service delivery team: case manager and nurse consultant
- ▶ Family or General Practitioner
- ▶ Other concurrent or future treatment providers.

**The health care professional is responsible for the following communication:**

### ***Communication with the worker***

Communication with the worker should be ongoing throughout the Program of Care.

### ***Communication with the employer***

The only personal information about the worker that may be released to the employer without the worker's consent is information relating to the worker's functional abilities.

At the beginning of treatment, contact the employer as appropriate, either by phone or by letter, to let the employer know that you will be involved in facilitating the worker's continued progress of return to work. Inquire about the physical demands of the worker's job and, if necessary, about possible modifications.

When the worker is ready for discharge contact the employer. Refer to Section D in the Care & Outcomes Summary.

The health professional is expected to contact the employer and maintain contact as necessary.

All communication should be documented in the worker's chart at intake and discharge.

### ***Communication with the WSIB***

Timely submission of the Initial Assessment Report, and Care & Outcomes Summary by the health care professional is essential. In addition, call the WSIB Clinical Expert Line when:

- ▶ The worker is not suitable for the Acute Low Back Injuries POC.
- ▶ The worker is not progressing as expected
- ▶ Red and yellow flags are identified that would warrant further evaluation outside the Program of Care.

**NOTE:** Information relating to the worker's health care may be released to the WSIB by health care practitioners, hospitals and health facilities without first obtaining the worker's consent. (See S.37 of the Workplace Safety and Insurance Act).

## References

---

Bigos, S., Bowyer, O., Braen, G., Brown, K., Deyo, R. Haldeman, S., et al. (1994). Acute low back problems in adults. Clinical Practice Guideline No. 14. *Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services. AHCPR Publication No. 95-0642*, Rockville, MD.

Canadian Task Force on the Periodic Health Examination (1979). The periodic health examination. *Canadian Medical Association Journal*, 121, 1193-1254.

Kendall, N.A.S., Linton, S.J., & Main, C.J. (1997). Guide to assessing psychological yellow flags in acute low back pain: Risk factors for long-term disability and work loss. *Accident Rehabilitation & Compensation Insurance Corporation of New Zealand and the National Health Committee*. Wellington, NZ.

Roland M., & Fairbank J. (2000). The Roland-Morris Disability Questionnaire and the Oswestry Disability Questionnaire. *Spine*, 25(24), 3115-3124.

Waddell, G., McIntosh, A., Hutchinson, A., Feder, G., Lewis, M., (1999). Low back pain evidence review. *Royal College of General Practitioners*. London, UK.