A Summary of the Guideline for the Evidence-Informed Primary Care Management of

Low Back Pain

3rd Edition, 2015 (Minor Revision 2017)

This evidence-informed guideline is for non-specific, non-malignant low back pain in adults only

Red Flags help identify rare but potentially serious conditions. They include:

- Features of Cauda Equina Syndrome including sudden or progressive onset of loss of bladder/bowel control, saddle anaesthesia (**emergency**)
- Severe worsening pain, especially at night or when lying down (urgent)
- Significant trauma (urgent)
- Weight loss, history of cancer, fever (urgent)
- Use of steroids or intravenous drugs (urgent)
- Patient with first episode of severe back pain over 50 years old, especially over 65 (soon)
- Widespread neurological signs (soon)

EMERGENCY - referral within hours
URGENT - referral within 24 - 48 hours
SOON - referral within weeks

Conduct a full assessment:

- History taking
- Physical and neurological exam
- Evaluation of **Red Flags**
- Psychosocial risk factors/**Yellow Flags**

Yellow Flags indicate psychosocial barriers to recovery. They include:

- Belief that pain and activity are harmful
- 'Sickness behaviours' (like extended rest)
- Low or negative mood, social withdrawal
- Treatment expectations that do not fit best practice
- Problems with claim and compensation
- History of back pain, time off, other claims
- Problems at work, poor job satisfaction
- Heavy work, unsociable hours (shift work)
- Overprotective family or lack of support

Any **Red Flags?** **Yes** → **Consider referring for evaluation (including lab tests and imaging as indicated) and treatment**
e. g., emergency room, relevant specialist, rheumatologist (in the case of inflammatory disease)

No

Acute and Subacute
(within 12 weeks of pain onset)

- **Educate patient** that low back pain typically resolves within a few weeks, but that recurrences are common (refer to patient information sheet and brochure)
- **Prescribe self-care strategies** including alternating cold and heat, continuation of usual activities as tolerated
- **Encourage early return to work**
- **Prescribe exercise or therapeutic exercise**
- **Consider analgesics** in this order:
  - Acetaminophen
  - NSAIDs
  - Short-course muscle relaxants
  - Short-acting opioids (rarely, for severe pain)

One to Six Weeks

Reassess (including Red Flags) if patient is not returning to normal function or symptoms are worsening

Consider Referral

- Physical therapist
- Chiropractor
- Osteopathic physician
- Physician specializing in musculoskeletal medicine
- Spinal surgeon (for unresolving radicular symptoms)
- Multidisciplinary pain program (if not returning to work)

Chronic
(more than 12 weeks since pain onset)

- **Educate patient** with a clear diagnosis, advice to stay active, and discussion of hurt vs. harm and activity pacing
- **Prescribe exercise or therapeutic exercise**
- **Analgesics Options**
  - Acetaminophen
  - NSAIDs (consider PPI)
  - Short-term cyclobenzaprine if prominent muscle spasm
  - Low-dose analgesic antidepressants

  See medication table in the complete guideline for recommendations if neuropathic pain suspected
- **Referral Options**
  - Community-based active rehabilitation program
  - Community-based self-management/cognitive behavioural therapy program
- **Additional Options**
  - Progressive relaxation or EMG biofeedback
  - Acupuncture, as a short-term or adjunct therapy
  - Massage, as an adjunct therapy
  - Yoga and aqua therapy

Moderate to Severe Pain

- **Tramadol, opioids** for carefully selected patients with documented functional goals to monitor for improvement (refer to Canadian National Opioid Guideline endorsed by the College of Physicians and Surgeons of Alberta - see p. 2)
- **Referral Options**
  - Multidisciplinary chronic pain program
  - Injection therapies in carefully selected patients
  - Surgery in carefully selected patients

Toward Optimized Practice

For complete guideline refer to the TOP Website:
www.topalbertadoctors.org

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Low Back Pain

Key Messages

- Do a full clinical assessment; rule out red flags and yellow flags
- In the absence of red flags, reassure the patient there is no reason to suspect a serious cause
- Reinforce that pain typically resolves in a few weeks without intervention, but may recur
- Recommend exercise and therapeutic exercise
- If pain continues beyond six weeks, reassess and consider additional treatment and referrals
- The goal of chronic pain management is improved quality of life
- Check for yellow flags and if present, follow good clinical practice*
- Encourage and support pain self-management
- Monitor patient for relative benefit versus side effects

*See the guideline's companion documents '**Clinical Assessment of Psychosocial Yellow Flags**' and '**Management of Psychosocial Yellow Flags**' on the TOP website

Contraindications

Evidence indicates these actions are ineffective or harmful

- Lab tests and diagnostic imaging in the absence of red flags
- Prolonged bed rest
- Traction (including motorized)
- Ultrasound
- Oral and systemic steroids
- Epidural steroid injections in the absence of radicular pain
- TENS for acute pain
- TENS as solo treatment for chronic pain

Medication Table

Pain Type	Medication		Dosage Range
Acute and sub-acute low back pain or flare-up of chronic low back/ spinal pain	**1st line**	Acetaminophen	Up to 1000 mg QID (max of 3000 mg/day long-term)
	2nd line NSAIDs (consider PPIs if >45 years of age)	Ibuprofen	Up to 800 mg TID (max of 800 mg QID)
		Diclofenac	Up to 50 mg BID
	Add: Cyclobenzaprine for prominent muscle spasm		10 to 30 mg/day; Greatest benefit seen within one week; therapy up to 2 weeks may be justified
	If already on a controlled release opioid: add a short-acting opioid or increase controlled release opioid by 20 to 25%		See opioids below
Chronic low back/spinal pain	**1st and 2nd lines**	See acute pain, above	
TRICYCLICS AND OPIOIDS	**3rd line** Tricyclics (TCAs)	Amitriptyline Nortriptyline* *fewer adverse effects	10 to 100 mg HS
	3rd line Weak Opioids	Codeine	30 to 60 mg every 3 to 4 hours
		Controlled release codeine	50 to 100 mg Q8h, may also be given Q12h
	4th line Tramadol**		Slow titration max 400mg/day. Note: Monitor total daily acetaminophen dose when using tramadol - acetaminophen combination
	5th line Strong Opioids** (controlled release)	Morphine sulfate	15 to 45 mg BID
		Hydromorphone HCl	3 to 10 mg BID
		Oxycodone HCl	10 to 30 mg BID
		Fentanyl patch	12.5 to 25 mcg/hr Q3 days

**for carefully selected patients with documented functional goals to monitor for improvement

- This guideline was written to provide primary healthcare providers and patients with guidance about appropriate prevention, assessment, and intervention strategies
- It was developed by a multidisciplinary team of Alberta clinicians and researchers
- This guideline is for adults 18 years of age or older with low back pain and is not applicable to pregnant women
- It is recognized that not all recommended treatment options are available in all communities
- See the 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain, available at: http://nationalpaincentre.mcmaster.ca/guidelines.html
- For further details on the recommendations visit: http://tinyurl.com/top-lowbackpain