A Summary of the Guideline for the Evidence-Informed Primary Care Management of **Low Back Pain**

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 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)
- First episode of severe pain with patient 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

Including:

- 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

Kendall et al. Guide to Assessing Psycho-social Yellow Flags in Acute Low Back Pain. ACC & NZGG, Wellington, NZ. (2004 Ed.).

Any **Red Flags?** **Yes** → **Consider referring for evaluation and treatment**

e.g., emergency room, relevant specialist

No

Acute and Subacute
(within 12 weeks of pain onset)

- **Educate patient** that low back pain typically resolves within a few weeks (refer to Patient Information Sheet)
- **Prescribe self-care strategies** including alternating cold and heat, continuation of usual activities as tolerated
- **Encourage early return to work**
- **Recommend physical activity and/or exercise**
- **Consider analgesics** in this order:
  - Acetaminophen
  - NSAIDs (consider PPI)
  - Short course muscle relaxants
  - Short-acting opioids (rarely, for severe pain)

1-6 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)

- **Prescribe physical or therapeutic exercise**
- **Analgesics Options**
  - Acetaminophen
  - NSAIDs (consider PPI)
  - Low dose tricyclic antidepressants
  - Short term cyclobenzaprine for flare-ups
- **Referral Options**
  - Community-based active rehabilitation program
  - Community-based self management/cognitive behavioural therapy program
- **Additional Options**
  - Progressive muscle relaxation
  - Acupuncture
  - Massage therapy, TENS as adjunct to active therapy
  - Aqua therapy and yoga

Moderate to Severe Pain

- **Opioids** (for appropriate patients: refer to the Canadian National Opioid Guideline endorsed by the College of Physicians and Surgeons of Alberta) See bottom of p.2 for link
- **Referral Options**
  - Multidisciplinary chronic pain program
  - Epidural steroids (for short-term relief of radicular pain)
  - Prolotherapy, facet joint injections and surgery in carefully selected patients.

Toward Optimized Practice

new for 2011

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
- 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
- Encourage patient to keep active
- Consider evidence-based management as per the guideline
- Recommend physical activity and/or exercise to prevent recurrence
- If pain continues beyond 6 weeks, reassess and consider additional treatment and referrals
- The goal of chronic pain management is improved quality of life
- Encourage and support pain self-management
- Monitor patient for relative benefit versus side effects

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)
- Therapeutic ultrasound for acute and subacute pain
- Oral and systemic steroids
- Epidural steroid injections in the absence of radicular pain
- TENS for acute pain
- Massage, prolotherapy and TENS as sole treatments 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)
		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 TID
		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 prescribing controlled release opioids: 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 (*not currently covered by Alberta Blue Cross)*		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 to100 mg BID
			Hydromorphone HCl	3 to 24 mg BID
			Oxycodone HCl	10 to 40 mg BID -TID
			Fentanyl patch	25 to 50 mcg/hr Q3 days

- 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 Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain, available at: http://nationalpaincentre.mcmaster.ca/opioid/
- For further details on the recommendations, see the guideline and background document