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 or 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 over 50 years old (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** →

Refer for immediate 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
  - 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
  - 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

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)
- **Referral Options**
  - Multidisciplinary chronic pain program
  - Epidural steroids (for short-term relief of radicular pain)
  - Prolotherapy in conjunction with exercise

Toward Optimized Practice

new for 2009

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
- Oral steroids
- Epidural steroid injections in the absence of radicular pain
- TENS for acute pain
- Back schools for acute pain
- Massage therapy for acute pain

Medication Table[1]

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 4000 mg/day)
	2nd line NSAIDs	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 taking 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	
OPIOIDS AND TRICYCLICS	**3rd line** Weak Opioids	Codeine	30 to 60 mg every 3 to 4 hours
		Controlled release codeine	50 to 200 mg Q8h, may also be given Q12h
	Tricyclics (TCAs)	Amitriptyline Nortriptyline fewer adverse effects	10 to 100 mg HS
	4th line Tramadol (*not currently covered by Alberta Blue Cross*)		Slow titration up to max of 400 mg/day; short acting form is only available in combination with acetaminophen. Monitor for total combined daily acetaminophen dose.
	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 µg Q3days

[1] *Adapted from the Calgary Regional Pain Program. September 19, 2006*

- This guideline was written to provide 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
- For further details on the recommendations, see the guideline and background document