

What You Should Know About Your

HEADACHE

Learn more about
headache types, triggers,
and treatments,
when to get help, and
how to help yourself

Introduction

The purpose of this brochure is to give you a better understanding of headaches in adults. It contains important facts about headaches, and explains what medical research has told us about the diagnosis and treatment of this condition.

This brochure is not meant to replace the care from your healthcare provider, but rather to remind you of things they may have already discussed with you. If you have questions about anything in this brochure, please discuss them with your healthcare provider.

The information in this brochure is based on an extensive review of medical research conducted by the **Institute of Health Economics** and healthcare providers from across the province of Alberta. This team has also developed a guideline for the assessment and treatment of headache by Alberta community-based healthcare providers, and topic-specific patient information sheets. These, as well as blank headache diaries, are available at: www.topalbertadoctors.org.

The guideline includes recommendations, which are systematically developed statements to assist healthcare provider and patient decisions about appropriate health care for specific clinical circumstances.

Table of Contents

Why Do I Have Headaches?.....	1
Do I Need Help?	2
What Works for Headaches?.....	3
What Can I Do to Help Myself?.....	4
Headache Diary and Identifying Your Triggers.....	4
The 4 Basics of Self-Management	5
Living a Healthy Lifestyle	7
Can Headaches Be Prevented?	8
What Are Migraine Headaches?.....	9
Should I Take Pain Medications for My Migraines?.....	10
Migraine Prevention	11
What Are Tension-Type Headaches?	13
Should I Take Pain Medications for My Tension-Type Headaches?	14
What Are Medication-Overuse Headaches? ..	15
How Are Medication-Overuse Headaches Treated?.....	16
Headaches During Pregnancy and Breastfeeding	18
What Doesn't Work for Headaches?	21
The Bottom Line for Headaches.....	23

Why Do I Have Headaches?

There are many reasons why you may have headaches, and nearly half of all adults experience headaches. **Migraine** is the most common type of recurrent, severe headache attacks. People with migraines seem genetically predisposed to have migraine attacks; it is part of their body chemistry. But many other factors (including exposure to headache triggers, discussed below) will influence how frequent their migraine attacks are. Other common headache types are called ‘**tension-type headache**’ and ‘**medication-overuse headache**’. Less is understood about why some people get tension-type headaches. Medication-overuse headaches are caused by taking headache medications too often; they occur mainly in people who already have migraines. Your healthcare provider can help determine what your particular headache type is.

What are headache triggers?

‘Headache triggers’ are what we call the things that cause your headache attacks or make them worse. While triggers can be different for everyone, common triggers include: stress, strong emotions, hormone changes, irregular schedules and poor sleep, fatigue, missing meals, **certain foods and beverages**, strong odours, and taking pain medications too often. Sometimes it takes a combination of triggers to cause a headache. If you experience migraines or tension-type headaches, other triggers may include fluorescent lighting, weather changes, uncomfortable positions, poor posture, and eyestrain.

*You can read more about headache triggers on **page 4**.*

Do I Need Help?

When should I get professional help for my headaches?

- If you have a new severe headache, or if your usual headache changes and is more severe or frequent.
- If your headaches are not well-controlled by your current treatments.
- If you are pregnant or breastfeeding and are taking headache medications.

Who can help me?

- Your family doctor is trained to assess and treat the common forms of headache.
- Neurologists are trained to assess the less common types of headache, or help when headaches are severe or disabling.
- Chiropractors and physiotherapists are trained to assess and treat headaches caused by neck muscle problems.

Do I need x-rays, an MRI, or laboratory tests?

- For most people, these tests are not needed to diagnose headaches.
- Your treating clinician will order tests only if the results could help you.
- For more information, see Choosing Wisely Canada at: www.choosingwiselycanada.org/materials/imaging-tests-for-headaches-when-you-need-them-and-when-you-dont/.

What Works for Headaches?

Research supports the use of various medical and non-medical treatments for headaches, and your healthcare provider can help decide what is best for you. There is often a great deal that you can do to reduce how often and how bad your headaches are, by using **headache ‘self-management’ skills**.

Should I take pain medications?

- Many medications can be effective, but everyone is different. You may need to work with your doctor to find the best medication for you.
- Over-the-counter medications such as ASA (e.g., Aspirin®), acetaminophen (e.g., Tylenol®), and ibuprofen (e.g., Advil® or Motrin®)¹ can be used for most headache types, but **not 15 or more days a month**. Frequent use of these standard medications can make headaches worse or harder to manage.
- Your doctor may prescribe other medications if your headaches are severe and interfere with your usual activities.
- If you are **pregnant or breastfeeding and experience headaches**, or if you tend to get headaches while menstruating, you may require specific medications to treat your headache.

¹ Note that ibuprofen and similar anti-inflammatory medications are also called ‘NSAIDs’. Some NSAIDs require a prescription.

What Can I Do to Help Myself?

Most people can reduce how often and how bad their headaches are by using headache self-management skills. Everyone is different, so the most effective way to figure out how to manage your headaches is to use a ‘headache diary’ to learn to:

- avoid or reduce your headache triggers,
- improve your management of the headaches you still have, and
- work towards a healthy lifestyle.

Headache Diary and Identifying Your Triggers

By jotting down information whenever you have a headache, you may see patterns in when, where, and why you may be having headaches, and be able to identify your personal **headache triggers**. Keeping your headache diary for at least a month will help you see these patterns.

When you think you have identified your headache triggers, you can test your ideas by doing things differently (e.g., get more sleep or avoid a particular food) and seeing what happens. The next time the expected trigger happens, you may be able to confirm that it was in fact a headache trigger for you. Keep in mind, though, that many of your headache triggers may not always trigger a headache by themselves or every time, and may only be able to start a headache attack if another trigger is also present.

For a blank headache diary you can fill out, visit:

www.ihe.ca/research-programs/hta/aagap/headache.

The 4 Basics of Self-Management

Manage triggers – By using your headache diary to keep track of your headache triggers as well as what you've done to deal with your headaches, you can pinpoint which triggers you can control (e.g., drinking red wine), and which you can't (e.g., weather changes). And by writing down any lifestyle changes you've made to manage your triggers, you'll be able to see what has been successful.

Manage stress – Stress comes in many forms, and can be anything that makes extra demands on your body or mind. Try to identify what is causing your stress, and then avoid or reduce the cause, if possible, or learn how to best respond to stress.

Some examples of stress management include:

- regular exercise,
- a healthy diet,
- keeping a regular sleep schedule, and
- asking others for support.

You can also learn about stress management skills such as relaxation training, biofeedback, and cognitive behavioural therapy by taking a course in your community or online, working with a psychologist or other trained health professional, and reading good-quality self-help materials. By writing down in your headache diary how you've dealt with your stress, you'll be able to see what has been successful.

The 4 Basics of Self-Management (cont'd)

Manage emotions – Try to identify what is causing any strong emotions you may be feeling, and learn how to best deal with those emotions. This may include expressing your emotions with someone you trust, deep breathing, working with a trained professional, and reading good-quality self-help materials. By writing down in your headache diary how you've dealt with your strong emotions, you'll be able to see what has been successful.

Minimize intensity and impact – To minimize your headaches, you can try to:

- react early (e.g., take medication, go for a short walk, do a relaxation exercise);
- use the right medication in the right amount at the right time;
- avoid activities that increase headache intensity (e.g., bright light, loud noises);
- avoid negative thinking (e.g., “*this is awful, I can't stand it*”);
- adopt more positive thinking (e.g., “*this is my usual headache and I know how to manage it*”);
- focus on breathing or calming thoughts; and
- let family, friends, and co-workers know what they can do to help out, even if it is leaving you to do your own thing while you have a headache.

By writing down in your headache diary what you've done to minimize your headaches, you'll know what you can do next time.

Living a Healthy Lifestyle

Once you've identified your personal headache triggers, including sources of stress and strong emotions, and you've figured out some effective self-management techniques to avoid, reduce, or deal with those factors, you may notice that you've had to make lifestyle changes to manage your headaches.

Working towards a healthy lifestyle involves doing what you can to improve your overall health and emotional well-being, including:

- a healthy diet and not skipping meals – a trained nutritional counsellor can help provide advice specifically for you
- regular exercise
- getting enough sleep and keeping a regular sleep schedule
- having support from family and friends

By making healthy changes to your daily life, you may find it easier to stay below your headache 'threshold' (the point at which a headache will start), and you may be pleased to find that you have fewer and less severe headaches.

Can Headaches Be Prevented?

If you get headaches often, you may not be able to get rid of them completely. By using your **headache diary** and skills learned from **the 4 basics of self-management**, and by **living a healthy lifestyle**, you can reduce how often your headaches occur. Other prevention methods include:

- **Reacting early** – Some people find that if they react as soon as they feel a headache starting (e.g., by taking medication, going for a short walk, or doing a relaxation exercise), they may prevent or reduce the severity of the headache.
- **Pacing** – Many people find that planning and carrying out their activities in a way that keeps them below their headache threshold is very helpful in preventing headaches.

There are many medications that can be used to reduce the frequency of different types of headache, called ‘preventive medications’. These are meant to be taken every day, and are different than the medications used to treat individual migraine attacks. See **page 11** for more information on migraine preventive medications, and **page 15** for more information on tension-type prevention.

What Are Migraine Headaches?

Migraines are the most common kind of recurrent, severe headache attacks that last from several hours to a few days. They are not always diagnosed by healthcare providers, leading to unnecessary suffering and disability.

How would I know if my headaches are migraines?

- If your headaches come with 2 or more of the following symptoms, you probably have migraines:
 - nausea
 - light sensitivity
 - problems doing usual activities during the headache attacks
- Recurrent migraine headaches are sometimes confused with headaches related to sinus infections ('sinusitis'). If the headache is sinus-related, it should improve with appropriate treatment that may include antibiotics. Most people with recurrent headaches who believe they have sinus headaches really have migraines.
- Common migraine triggers include stress, irregular schedules and poor sleep, missing meals, certain foods and beverages, fluorescent lighting, weather changes, and taking pain medications too often. See [page 4](#) for more information on headache triggers.

Should I Take Pain Medications for My Migraines?

Everyone is different. Your doctor has guidelines to help select medications that are likely to be best for you, and other symptoms/medical conditions such as nausea or high blood pressure may affect which is the best choice. Also, most acute medications do not work on every occasion when they are used. Working with your doctor, you may need to try a medication for several different attacks, and you may need to try several medications, before finding the right one for you.

- Over-the-counter medications such as ASA, acetaminophen, and ibuprofen can be effective, particularly for mild or moderate migraines.
- Many prescription medications can also be effective, such as triptans (e.g., sumatriptan, Imitrex®).
- Medications containing codeine or other opioid may be necessary at times, but are best avoided.
- If you have nausea or vomiting with your migraine attacks, there are options such as triptan wafers, nasal sprays, or injections that may be best.
- **More is NOT necessarily better.** Using migraine medications such as acetaminophen or NSAIDs (nonsteroidal anti-inflammatory drugs) 15 or more days a month, or a triptan or medication containing codeine or another opioid 10 or more days a month may cause a headache type called ‘medication-overuse headache’.
- Some headache medications are not recommended if you are pregnant or breastfeeding (see [page 18](#)).

Migraine Prevention

Migraine preventive medications are meant to be taken every day to reduce the number of migraines you have in a month, and are different than the medications you use to treat an individual migraine attack ('acute' or 'symptomatic' medications). If needed, they should be used in addition to the **headache self-management strategies** you've learned. By using your headache diary, you can also track your headaches and see if a preventive medication is working for you. A successful preventive medication will decrease your migraine attack frequency by 50% or more, but will not usually stop your migraine attacks completely.

Unlike acute migraine medications, preventive medications do not cause medication-overuse headaches.

When should I consider taking a migraine preventive medication?

- If your migraines cause significant disability even though you are appropriately taking medications for individual migraine attacks.
- If you need to take medications for your migraines frequently (15 or more days a month for acetaminophen or NSAIDs; or 10 or more days a month for triptans or medications with codeine and/or caffeine).

Migraine Prevention (cont'd)

Which migraine preventive medication should I try?

- Your doctor has guidelines to help select preventive medications that are likely to be best for you – **everyone is different**, and other aspects of your health such as blood pressure, weight, and whether you have insomnia or depression may affect which medication works best.
- Working with your doctor, you may need to try several preventive medications, and it can take 2 to 3 months to see if a particular medication is the right one for you.
- The medications most commonly used for migraine prevention include propranolol, nadolol, amitriptyline, candesartan, and topiramate.
- For menstrual migraines, using oral contraceptives continuously may be an option if your doctor agrees this is safe for you.
- For chronic migraines (more than 14 days a month), onabotulinumtoxinA (Botox®) may be an option.
- If you are pregnant or breastfeeding, see [page 18](#).
- If you prefer herbal or non-prescription medications, you might consider magnesium citrate, riboflavin (vitamin B2), or coenzyme Q10.²
- If you have side effects like nausea, fatigue, dizziness, or sedation from your preventive medication, your doctor may help find a better medication for you.

² Note that butterbur is no longer recommended for migraine prevention.

What Are Tension-Type Headaches?

If you have recurrent, frequent headaches that are not migraines, you may have ‘tension-type’ headaches.

How would I know if my headaches are tension-type?

- If your headaches don’t fit the migraine symptoms described earlier in this brochure, are ‘episodic’ (occur some days and not others), do not come with nausea, and have 2 or more of the following features, you probably have tension-type headaches:
 - are on both sides of your head
 - are not pulsing or throbbing
 - are of mild to moderate intensity
 - are not worsened by physical activity
- Although tension-type headaches are usually mild or moderate, they can be severe.
- Sometimes tension-type headaches occur more than 15 days a month and can come with mild nausea. These are called ‘chronic tension-type headaches’.
- Common tension-type headache triggers can include uncomfortable positions, poor posture, and eyestrain.
- Tension-type headaches can often be managed without going to your doctor, and medications are often not necessary. **Headache self-management skills** and **healthy lifestyle changes** are often effective for mild and moderate tension-type headaches. Over-the-counter medications can be used if necessary.

Should I Take Pain Medications for My Tension-Type Headaches?

Everyone is different. Your doctor has guidelines to help select medications that are likely to be best for you.

- Over-the-counter medications such as ASA, acetaminophen, ibuprofen, and naproxen sodium can be effective, particularly for mild or moderate tension-type headaches.
- Muscle relaxants, narcotics, and migraine-specific medications known as triptans are not recommended for tension-type headaches.
- **More is NOT necessarily better.** Using headache medications such as acetaminophen or NSAIDs 15 or more days a month may cause medication-overuse headache.
- Some headache medications are not recommended if you are pregnant or breastfeeding (see [page 18](#)).

Can tension-type headaches be prevented/cured?

While there is no known cure, there are both medical and non-medical treatments that reduce how often tension-type headaches occur and how bad they are. If lifestyle changes and headache self-management techniques are not sufficiently helpful, daily preventative medications prescribed by your doctor can be helpful if you have these headaches very often.

What Are Medication-Overuse Headaches?

If you have very frequent headaches, for example headache on more than 14 days a month, you may have ‘medication-overuse’ headaches. These are especially likely to occur if you have migraines.

How would I know if my headaches are medication-overuse type?

- Taking medication too often for headache attacks is a common cause of very frequent or daily headaches in people who used to have only occasional headaches. When this happens, they may be medication-overuse headaches.
- Medication-overuse headaches become likely when taking acetaminophen, an NSAID, or similar medications 15 or more days a month, or a triptan or medications containing caffeine or codeine (or another opioid) 10 or more days a month. By keeping track of your medication use in your headache diary, you can see if this applies to you.
- Medication-overuse is not always the cause of daily headaches. Even if you are using medications too often, there may be other/additional causes for your daily headaches. Ask your doctor if you’re not sure.
- After a headache medication that is suspected of causing your medication-overuse headache is stopped (see [page 16](#)), you will likely experience a gradual reduction in the frequency of your headaches. Note that, for some people, their headaches temporarily get worse before they get better.

How Are Medication-Overuse Headaches Treated?

- If your headaches are mild or moderate and you take more medication than is recommended, you can try to treat yourself by stopping or reducing your medication use:
 - For acetaminophen, ibuprofen, or triptans, stopping the medication all at once is recommended.
 - For opioid medications including medications that contain codeine, gradual reduction is recommended. Ask your doctor for help before stopping them if you are taking more than a few tablets a day of these medications.
- If your headaches are severe and you are concerned about stopping the medications, you should work with your doctor to treat your headaches more effectively.
- You may experience a temporary increase in headache symptoms or ‘withdrawal symptoms’ for a week or possibly longer after stopping your medication. If the withdrawal symptoms are more than you can live with, see your doctor.
- If you’ve stopped or reduced your medications for more than a month and your headaches have not decreased, see your doctor.
- Work with your doctor to find better treatments for your headaches so you don’t have to use medications as often.

Medication-Overuse Headaches (cont'd)

If I've stopped my medications and my headaches are better, can I ever use these medications again?

- It is usually okay to treat individual headaches with acetaminophen, ibuprofen, or a triptan on 1 or 2 days a week.
- It is usually best to avoid codeine-containing medications or other opioid medications.
- It may also help to explore alternatives such as headache self-management and preventive medications.
- Medications that prevent headaches may be more effective after you've stopped overusing the medications you previously used to treat individual headache attacks.

Headaches During Pregnancy and Breastfeeding

If you become pregnant or are breastfeeding and are taking headache medications, talk to your doctor. You may need to stop taking medication or use different medications than you have are currently using, both to treat and prevent your headaches.

The following is information specific to treating and preventing migraine and tension-type headaches.

Migraine Treatment

Migraine treatment during pregnancy

Headache medications should be avoided during pregnancy if possible. Any medications used during pregnancy should be taken at the lowest effective dose, for the shortest time necessary.

- ASA, ergot alkaloids, and domperidone should be avoided during pregnancy.
- It is not known whether triptans are safe during pregnancy. Sumatriptan may be considered if necessary, but talk to your doctor before using it.
- All NSAIDs should be avoided in the third trimester (the last three months of pregnancy).

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Headaches During Pregnancy and Breastfeeding (cont'd)

- If necessary, acetaminophen and metoclopramide are considered safe at their lowest doses, for short time periods throughout your pregnancy.
- If necessary, ibuprofen at its lowest dose for a short time is also considered safe EXCEPT during the third trimester. It may also increase the risk of miscarriage if taken during the first trimester.

Migraine treatment while breastfeeding

- ASA should be avoided for migraine treatment while breastfeeding.
- If necessary, acetaminophen, metoclopramide, domperidone, dimenhydrinate, prochlorperazine, and sumatriptan are all considered safe for migraine treatment while breastfeeding.
- If necessary, ibuprofen is the preferred NSAID for migraine treatment while breastfeeding.

Migraine Prevention

Preventive medications should be avoided if possible during pregnancy and breastfeeding. If you feel they are absolutely necessary, talk to your doctor about possible options.

Headaches During Pregnancy and Breastfeeding (cont'd)

Tension-Type Headache Treatment

Headache medications for individual attacks should be kept to a minimum during pregnancy and breastfeeding.

- Acetaminophen is considered safe at its lowest dose, for short time periods throughout your pregnancy and while breastfeeding.
- Ibuprofen is considered safe during pregnancy **EXCEPT during the third trimester**. It may also increase the risk of miscarriage if taken during the first trimester. It is considered safe while breastfeeding.

Tension-Type Headache Prevention

If daily preventive medications are being taken for tension-type headache, these should usually be stopped prior to planning a pregnancy or when pregnancy is diagnosed. Preventive medications should also be avoided if possible while breastfeeding. If you feel they are absolutely necessary, talk to your doctor about possible options.

What Doesn't Work for Headaches?

There are some treatments that are recommended only for specific headache types or situations. For example, migraine-specific medications are not recommended for tension-type headaches. If you're unsure if a medication you take is right for your headache type, ask your doctor.

For most headache types, it is usually best to avoid codeine-containing or other opioid medication.

Based on scientific research, the following treatments and preventive methods that you may have heard about are **not** recommended for headaches (for treatments not recommended for headaches during pregnancy and breastfeeding, see [page 18](#)):

- *For migraine treatment:* Ergotamine, butalbital, opioids, homeopathy
- *For migraine prevention:* Butterbur, feverfew, gabapentin, NSAIDs, SSRIs (selective serotonin reuptake inhibitors). Onabotulinum-toxinA (Botox®), is recommended for chronic migraine (migraine with headache on more than 14 days a month) but not for patients with less frequent migraine headaches.
 - Note: Butterbur is no longer recommended for migraine attack prevention because some products sold as butterbur do not actually contain butterbur, and some have not adequately removed all the toxic substances that natural butterbur contains.

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What Doesn't Work for Headaches? (cont'd)

- *For tension-type headache treatment:* Muscle relaxants; opioids and combination analgesics containing codeine; triptans
- *For tension-type headache prevention:* Onabotulinum-toxinA (Botox®)

There hasn't been enough research to tell us whether or not the following treatments are helpful for people experiencing headaches:

- *For migraine treatment:* Intranasal lidocaine, cranial-sacral therapy, hypnotherapy, intra-oral acrylic splints, low-level laser therapy, massage, normobaric and hyperbaric oxygen therapy, NUCCA procedure, single-pulse or repetitive transcranial magnetic stimulation, spinal manipulation, TENS, transcutaneous supraorbital nerve stimulation, occipital nerve blocks
- *For migraine prevention:* Melatonin, verapamil
- *For chronic migraine prevention:* Gabapentin
- *For tension-type headache treatment:* Cranial-sacral therapy, hypnotherapy, low-level laser therapy, manual traction, massage, NUCCA procedure, spinal manipulation, TENS, trigger point injections or dry needling

The Bottom Line for Headaches

For any headache type, there is often a great deal that you can do to reduce how often and how bad your headaches are. While some headache types aren't preventable or curable, by tracking your headache patterns, triggers, and successful management of previous headache attacks, you can learn how to prepare for and manage future attacks.

When should I go back to my doctor or healthcare provider for my headache?

- If your headaches don't improve with the prescribed treatment and continue to interfere with your activities or affect your quality of life.
- If your headaches get worse or you have new symptoms.

This publication is available for free download from the IHE website at <http://www.ihe.ca>.

Also available are topic-specific information sheets:

What You Should Know About Your Headache

What You Should Know About Headache Self-Management

What You Should Know About Your Migraine Headache

What You Should Know About Migraine Preventive Medications

What You Should Know About Your Headache During Pregnancy and Breastfeeding

What You Should Know About Your Tension-Type Headache

What You Should Know About Your Medication-Overuse Headache

Food triggers, caffeine and migraine attacks information sheet

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