



## Nausea and Vomiting

By: The Canadian Virtual Hospice Team

# What is nausea and vomiting?

#### Nausea

- Nausea is a sick or uncomfortable feeling in the stomach, often described as an urge to vomit or throw up.
- \* Some people describe it as an uncomfortable feeling at the back of the throat.
- \* Some people find it difficult to describe exactly how they're feeling.

### **Vomiting**

 Vomiting is a strong tightening of the stomach muscles that forces whatever is in the stomach to come out through the mouth.

## Nausea and vomiting

- \* These are often talked about together, but it's possible to have one without the other.
- Many people find nausea more disturbing than vomiting.

### Retching

- \* People who are nauseated often retch.
- \* Retching is also known as the "dry heaves."
- \* This happens when the body attempts to vomit but there's no food in the stomach to bring up.
- Even though the stomach is empty, small amounts of mucous and *bile* may come out of the mouth.

# Causes of nausea and vomiting

Nausea and vomiting can have various causes such as:

- · Illness.
- Medication.
- Medical treatments.
- Constipation.
- Food.
- Smells, sights, sounds.
- Feeling anxious.
- Pain.
- Motion (nausea of any cause is often made worse by movement).

## Triggers of nausea and vomiting

Nausea and vomiting can be triggered by:

### Chemicals in the bloodstream:

- \* This may be due to:
  - \* Side effects of medications such as some chemotherapy treatments.
  - \* A weak liver or kidneys that are unable to clear the bloodstream.

### Digestive problems such as:

- The stomach emptying too slowly
- Constipation
- \* A blockage, such as a tumour, in the intestine (also called a bowel obstruction)
- Irritation of the lining of the stomach or intestines which can be caused by:
  - Radiation treatments
  - Infections
  - Some medications

#### Irritation of the motion centre in the brain

- The *motion centre* is the system in the body that controls our balance, coordination, and sense of motion and position.
- Illness can upset this system, triggering nausea and vomiting.
- Motion sickness is the most common example. The movement of cars, boats, or airplanes can make people nauseated.
- Nausea of any cause is often made worse by movement.

## Increased pressure on the brain

- \* A brain tumour, for example, can create increased pressure.
- Movement often makes this worse.

### Anxiety, association, and anticipatory nausea

- \* It's common to feel nauseated when anxious.
  - \* Stage fright is a good example.
- Some people feel nauseated seeing or smelling things that remind them of past treatments or thinking about something that made them nauseated in the past.
  - \* This is known as association.
- \* Some people become nauseated as they prepare for their next chemotherapy treatment.
  - \* This is called anticipatory nausea.

## Nausea, vomiting, and emotions

Feeling nauseated all the time is physically and mentally stressful and exhausting.

- It's hard for someone who's nauseated to concentrate or enjoy life.
- Some people become isolated.
  - They feel embarrassed to eat around others for fear they'll become nauseated or vomit.
  - They try to avoid smells they know will make them feel worse such as food, cooking and perfumes.
  - For these reasons, they stay home and avoid socializing with friends.

- They may develop anticipatory nausea as they think about trying to eat. This can be a difficult cycle to break.
- They may become anxious or depressed.

Healthcare providers can help determine the best approach to manage nausea and vomiting. It's important to discuss these symptoms with them.

# Assessing and diagnosing

The healthcare provider will want to understand what's causing nausea and vomiting for several reasons:

- It may be a sign of something more serious that the person is not aware of.
  - \* For example, if nausea is caused by a bowel obstruction, finding and treating it is the best way to treat the nausea and potential serious complications of the obstruction.
- The drugs and therapy they prescribe will depend on the suspected cause.
- \* Without treatment, new medical problems might develop, such as dehydration.

To learn more about dehydration, the healthcare provider will probably ask questions, do a physical exam, and may run some tests. This will help them decide how best to manage these symptoms.

### Questions

#### TIP:

Keep track of your symptoms in a daily symptom diary. Sharing this information with the healthcare provider will help them to manage these symptoms.

- Do you always feel nauseated, or does this come and go?
- \* What seems to trigger the nausea and vomiting or make it worse?
  - Eating?
  - Certain medications or treatments?
  - Feeling anxious?
  - Movement or certain body positions?
  - Smells?
  - A hot stuffy room?
- What makes it better?
  - Staying still?
  - \* Eating plain foods?
  - Drinking liquids slowly?
- How long does the nausea last?
- How long does the vomiting last?
- Do you always feel nauseous before vomiting?
- What does the vomit look like?
  - Is there bright red blood?
  - Does it have a dark or black appearance? (This might suggest old blood and is sometimes called "coffee ground vomiting.")
- Does it taste or smell of stool?
- What medicines are you taking for nausea and vomiting?
  - When do you take them?
  - \* How long have you been taking the medication (days, weeks, months)?
  - Are the medications working?
  - \* How long do they work?
  - Are you having any side effects?
- Does your nausea and vomiting interfere with normal activities?

- What other medications are you taking?
  - Prescription medications?
  - \* Over-the-counter medications?
  - \* Herbal medications and naturopathic remedies?
- What else are you doing to help the nausea and vomiting?
  - \* Herbal remedies?
  - Relaxation techniques?

When was your last bowel movement? How often do you have them? Have your bowel movements changed?

### Physical exam

The healthcare provider will likely do a fairly, complete physical exam. They'll likely pay particular attention to the abdomen, looking for signs that there might be:

- \* A blockage of the bowel.
- More tenderness than expected.

#### Tests

A number of tests may be done to help sort out possible causes. For example:

- Blood tests to look for chemical imbalances in the blood such as:
  - Weakness of liver or kidney function.
  - \* A high calcium level.
  - \* Evidence of dehydration.
- \* X-rays to check for blockages in the intestine.

### Medications and other treatment

#### Medications

While nausea and vomiting can seriously take away from <u>quality of life</u>, medications are often helpful for most people. Medications are chosen to:

- Target the most likely cause.
- \* Work in general ways to reduce the symptom. rather than target the cause.

In situations that are likely to cause nausea or vomiting, consider taking your prescribed medication ahead of time. For example, before:

- Some chemotherapy or radiation treatments.
- \* Travelling by car.

Medications may include the following:

### **H1** receptor antagonists

- These medications lessen nausea associated with motion sickness or opioid induced nausea.
- \* One example is dimenhydrinate (Gravol).
- Talk with a healthcare provider prior to taking this medication. It might cause sleepiness, making it unsafe to drive. Sleepiness may be greater than expected if a person is taking other medications such as opioids.

#### Motility agents

- These help the upper bowel to move.
- They also work at the vomiting centre in the brain, to lessen nausea.

### 5 HT3 receptor antagonists

- These work at several sites in the body to reduce nausea.
- They can be particularly effective with nausea related to chemotherapy and radiation therapy.
- One example is Ondansetron.

### Steroids - specifically the anti-inflammatory kind.

Most commonly used is dexamethasone.

## Anti-psychotics

• These can be very effective in reducing nausea, depending on the cause.

## Anti-anxiety medications

\* These are used if anxiety is felt to be a significant contributing factor.

### Possible side effects of anti-nausea medication

### Sleepiness

- This is more noticeable when a new medication is first started but tends to lessen with ongoing use.
- It may impact the safety of some activities such as driving.
- Other medications may add to this side effect such as opioids or medications used to reduce anxiety.

#### Confusion

- \* This is a less common side effect and varies with the medication.
- Some people may be more likely to develop this side effect, depending on other existing medical conditions and other medications they're taking.

## Tremors or muscle rigidity

- \* This side effect is similar to some symptoms of Parkinson's disease.
- \* It occurs more common in the elderly.
- Children and young adults are more likely to experience spasms in face or neck muscles.
- Medications that may cause this side effect include:
  - Metoclopramide.
  - \* Antipsychotics, such as haloperidol, prochlorperazine and methotrimeprazine.

It is important to let the healthcare provider know about any of these side effects.

## Possible side effects of steroids

Steroids may cause a variety of side effects, some of which occur almost immediately and some of which are seen after longer term use.

Short-term side effects include:

- Agitation.
- \* Restlessness.
- Interrupted sleep.

- Increased blood sugars.
- Increased appetite.
- Thrush.
- Increased bleeding if used with non-steroidal anti-inflammatory drugs (NSAIDs).
  - NSAIDs are not recommended.

Long-term side effects are:

- \* Weight gain.
- Muscle weakness.
- Osteoporosis.
- Osteonecrosis (extremely rare).

Be sure to tell the healthcare provider if any concerning side effects occur.

# When swallowing medication is difficult

It can be difficult to swallow medication or keep it down if a person is nauseated, vomiting, or both. In this case, many medications can be given in other ways, including:

- By injection:
  - Into a vein (intravenously).
  - \* Under the skin (subcutaneously).
- By patch so the drug is absorbed through the skin.
- Under the tongue.
- By a suppository that's inserted into the rectum.

These are often referred to as *alternate routes of administration*. If swallowing medication is difficult, consider asking the healthcare provider if it's possible to have some of these "alternate routes" on hand. This approach can be helpful especially if a person is nauseated or vomiting and unable to swallow medication.

# **Complementary therapies**

Complementary therapies might help to:

- Lessen nausea and vomiting.
- Distract a person.
- Relax a person.

Before trying a complementary therapy:

- \* Talk with a healthcare provider, in case they have concerns about a certain therapy and a patient's particular health circumstances. For example:
  - \* Some herbal remedies may affect how prescribed medications work.
  - Heat therapies are best avoided with certain disorders, such as reduced ability of the skin to feel hot temperatures (risk of burns).
- After discussion and approval from a healthcare provider, experiment with different approaches until perhaps a helpful one is found.
  - \* A therapy that works for one person might not work for another.

Some complimentary therapies include:

- Acupuncture.
- \* Biofeedback.
- Breathing and relaxation exercises.
- Distraction.
- Herbal remedies such as ginger.
- Hypnosis.
- Massage.
- Mindfulness meditation

Music therapy.

# What you can do

### **Urgent situations**

Seek medical attention immediately for any of the following:

- Blood in the vomit.
  - \* The blood could be bright red or dark brown/black (the colour of coffee grounds).
- \* Severe pain in the abdomen.
- \* Projectile vomiting (vomit shoots straight out and travels far).
- \* Vomit that smells like stool or bowel movements.
- The person becomes increasingly sleepy and hard to wake up.

# When you are living with illness

Living with serious illness can be physically, mentally, spiritually and emotionally challenging. In this section, you'll find suggestions that might help you manage these stressful times.

### Talk with your healthcare provider

- \* Tell them about your nausea and vomiting.
- \* Show them your daily symptom diary.

#### TIP:

Keep track of your nausea and <u>fatigue</u> in a <u>daily symptom diary</u>. Sharing this information with your healthcare provider will help them to help you.

### Watch what you eat and drink

- \* Eat smaller, more frequent meals, and only if you feel like it.
- Eat foods that appeal to you.
- \* Eat foods cold or at room temperature.
- · Avoid:
  - Fried and fatty foods.
  - Spicy foods.
  - \* Acidic foods such as oranges, lemons, and vinegar.
- Eat foods that have little or no flavor such as crackers and dry toast.
- If you're nauseated in the morning, eat dry foods like toast, crackers, or handfuls of dry cereal before getting out of bed.
- \* Avoid the smells and sights of cooking.
  - Make sure you have good air flow if you're near the kitchen.
- Drink small amounts of liquids frequently to prevent dehydration.
- Sip slowly when drinking.
- Drink cold or chilled liquids. Freeze liquids into popsicles.
- \* Suck on ice cubes, mints, or hard sugarless candies.
- Don't drink large amounts of fluid with solid food.
- Drink liquids an hour before or after meals.

## After throwing up

- \* Clean out your mouth using one of these methods:
  - \* Put a teaspoon of baking soda in a glass of warm water, use the solution to rinse

- your mounty man opic it out
- Rinse your mouth with water.
- Brush your teeth.
- Avoid alcohol-based mouthwashes as these can irritate the mouth.
- Clean out your throat by taking a small sip or two of water.
- \* Drink small sips of clear liquids such as water or apple juice once your stomach settles.
- After your stomach is settled or your medication is working, try to drink extra liquids to replace the fluid you lost when you threw up.

## Find support

Many people find it helpful to connect with others when they have an illness. These are some suggestions to consider.

- Talk with someone you trust, like a friend or family member. Sometimes just talking with someone can help you feel better.
- \* Ask a healthcare provider to refer you to a counsellor such as a psychologist or social worker. They can offer:
  - Counselling and emotional support.
  - Education.
  - Practical suggestions to help you manage your symptoms.
- \* Talk with a spiritual care specialist.
- Find information online.
  - <u>Canadian Virtual Hospice</u> has information on many topics related to serious illness and palliative care.
- Join online discussion forums such as:
  - Canadian Virtual Hospice Discussion Forums.
  - \* Cancer Chat Canada.
- If you can manage it, join a support group where you can meet people who may have similar health concerns.
- \* Learn more about <u>Programs and Services</u> in your area.

## When someone you care about is living with illness

It can be difficult to watch someone important to you face a serious illness. Helping this person with symptoms such as pain, constipation, nausea, and vomiting can be exhausting. It can also lead to feelings of isolation when others may not appreciate the challenge of caring for someone with these symptoms. The following suggestions might help you through this difficult time.

#### Find support

Many people find it helpful to connect with others. These are some suggestions to consider.

- Talk with someone you trust. Sometimes just talking with a friend or family member can help you to feel better.
- Ask the healthcare provider to refer you to a counsellor such as a psychologist or social worker. They can offer:
  - \* Counselling and emotional support.
  - Education.
  - Practical suggestions to help with stress.
- Talk with a spiritual care specialist.
- Ask about a support group for caregivers.
- Find information online
  - <u>Canadian Virtual Hospice</u> has information on many topics related to serious illness and palliative care.

- Join online discussion forums such as:
  - \* Canadian Virtual Hospice Discussion Forums.
  - Cancer Chat Canada.
- \* Learn more about Programs and Services in your area.

## Try complementary therapies

- Various therapies such as relaxation techniques, meditation and yoga can be helpful to manage stress.
- \* To learn more, go to Complementary therapies.

## Take time for yourself

- Choose an activity or something you enjoy. It might be reading, praying, listening to music, watching sports – or something else.
- \* Regular exercise is important to manage stress. What physical activities do you enjoy? Walking? Biking? Something else?

## Respecting choices

You might disagree with the choices someone makes about treatments and how they live with their illness. Perhaps you feel their choices are unsafe, might cause harm, or risk losing an opportunity to get better. This can be frustrating and upsetting. It's okay to tell this person, respectfully, how you feel about their choices and how they affect you – but remember, everyone has the right to make their own decisions.

If you're concerned this person is no longer able to make good choices, or that their choices may be putting others at risk, speak to the healthcare provider.

Content reviewed January 2023