CONDITION

Motion sickness

Motion sickness causes nausea and related symptoms when the brain receives conflicting signals about movement

WHAT IT IS
Illness caused by conflicting signals about movement

BODY SYSTEM
Nervous system and inner ear

MAIN SYMPTOMS
Nausea, dizziness, sweating, vomiting

WHAT CAUSES IT
Mismatch between visual and balance signals

HOW IT IS DIAGNOSED
Symptom pattern linked to motion

MAIN TREATMENT
Travel strategies and anti-sickness medicines

CAN IT BE CURED?
No - susceptibility may persist but symptoms are manageable

IS IT AN EMERGENCY?
Sometimes - severe dehydration or neurological symptoms

LONG-TERM OUTLOOK
Usually brief, manageable, and limited to motion exposure

Overview

Motion sickness is a group of symptoms caused by real or expected movement. It can happen in cars, buses, boats, aircraft, trains, amusement rides, or virtual reality. Some people also develop it while playing video games or watching moving images.

Your brain works out where your body is by combining signals from your eyes, inner ears, muscles, and joints. Motion sickness can develop when these signals do not agree. For example, your inner ear may sense a boat moving while your eyes see a cabin that appears still.

Nausea is the best-known symptom, but motion sickness can also cause dizziness, sweating, tiredness, headache, and vomiting. Symptoms usually improve after the movement stops. They may return during future journeys.

Motion sickness is uncomfortable but is not usually dangerous. Repeated vomiting can sometimes cause dehydration, particularly in young children and older adults. Symptoms that start without motion, continue long after travel, or include problems such as weakness or difficulty speaking may have another cause.

Symptoms

Symptoms often begin gradually. Early signs may include yawning, extra saliva, a feeling of warmth, or mild stomach discomfort.

Common symptoms include:

Some people become unusually drowsy or withdrawn without much nausea. This motion-related tiredness is sometimes called sopite syndrome .

Symptoms may build if the movement continues. Vomiting does not always relieve the nausea. Most people begin to recover once they reach stable ground, although tiredness or mild unsteadiness may remain for several hours.

A brief rocking feeling after leaving a boat or other moving vehicle can be normal. A rocking or swaying sensation that lasts for days, becomes severe, or interferes with walking is not typical motion sickness and should be assessed.

- Nausea or an unsettled stomach
- Dizziness or a sense of imbalance
- Cold sweating and pale skin
- Vomiting
- Headache
- Tiredness, sleepiness, or difficulty concentrating
- Loss of appetite
- Faster breathing

Causes and risk factors

Motion sickness is linked to a conflict between the body's movement signals.

The inner ear contains the vestibular system , which senses head movement, acceleration, and balance. Your eyes provide information about the movement around you. Sensors in your

muscles and joints tell the brain about body position. When these messages conflict, brain areas involved in balance and nausea may become activated.

Examples include reading in a moving car, sitting below deck on a boat, or using a virtual reality headset. In each case, what the eyes report may differ from what the inner ear senses.

Anyone with a functioning balance system can develop motion sickness, but susceptibility differs. Factors associated with a greater chance of symptoms include:

Babies and very young children are less likely to be affected because their visual and balance systems are still developing. Susceptibility often decreases with age, but adults can continue to have symptoms.

Anxiety can make nausea feel worse and may cause symptoms to begin earlier. This does not mean motion sickness is imagined. The underlying response to movement is physical.

- Being a child, especially during the school-age years
- Having migraine
- Previous episodes of motion sickness
- Pregnancy or hormonal changes
- Lack of sleep
- Anxiety about becoming sick
- Strong smells, poor ventilation, or seeing someone else vomit

Diagnosis

There is no blood test, scan, or balance test that confirms ordinary motion sickness. It is usually identified from a clear pattern: symptoms begin during a particular type of movement and improve when that movement ends.

A healthcare professional may ask about the trigger, timing, past episodes, migraine, hearing symptoms, medicines, and how long recovery takes. An examination may be appropriate if symptoms are new, severe, persistent, or not clearly connected to travel.

Further testing is not usually needed. It may be considered when symptoms could come from another condition, such as an inner-ear disorder, migraine, infection, low blood pressure, or a neurological problem affecting the brain or nerves.

Dizziness has several meanings. Motion sickness commonly causes light-headedness, nausea, or imbalance. A strong spinning sensation, known as vertigo , may point to an inner-ear or neurological condition, especially if it continues after motion stops.

Treatment and management

The first step is to reduce the mismatch between visual and balance signals. It may help to look at the horizon or another stable point, face forward, and keep your head still against a headrest.

Where you sit can make a difference. Movement is often less noticeable in the front of a car, near an aircraft's wings, or near the middle of a ship. Driving may reduce symptoms for some people because the driver can predict the vehicle's movement. A person who feels dizzy or has taken a sedating medicine should not drive.

Other practical measures include:

Anti-sickness medicines can help prevent or reduce symptoms. They usually work better when taken before movement starts because tablets may be harder to absorb once vomiting begins.

Options include sedating antihistamines, such as dimenhydrinate, meclizine, cyclizine, or promethazine. Availability differs by country. These medicines can cause sleepiness, blurred vision, dry mouth, or difficulty concentrating. Antihistamines like cetirizine or loratadine marketed as "non-drowsy" generally do not work well for motion sickness.

Scopolamine, also called hyoscine, is available in some places as a patch or other formulation. It blocks a nerve chemical involved in nausea and balance signals. Possible effects include dry mouth, blurred vision, sleepiness, confusion, or difficulty passing urine. A patch can transfer medicine to the eyes through the fingers, so handwashing after handling it is important.

Medicine choice requires extra care for children, during pregnancy or breastfeeding, and for people with certain eye, urinary, heart, or neurological conditions. A pharmacist or clinician can check whether a product is suitable. Sedating medicines should not be combined with alcohol, and their labels should be followed regarding driving or operating machinery.

Evidence for ginger and acupressure wristbands is mixed. Some people find them helpful, but they should not replace fluids or medical assessment when vomiting is persistent.

- Avoiding reading, films, games, and close-up screen use
- Closing your eyes or lying back when a stable view is unavailable
- Getting fresh air and moving away from strong smells
- Eating a small, light meal rather than a heavy meal
- Being well rested before travel
- Taking breaks during a long road journey

Complications

Most episodes end without complications. The main physical concern is dehydration from repeated vomiting. Signs include a very dry mouth, reduced urination, dark urine, weakness, or unusual sleepiness.

Vomiting can also make it difficult to take regular medicines or control conditions that rely on steady fluid and food intake. Severe retching may rarely irritate the throat or food pipe.

Drowsiness, blurred vision, and slower reactions from anti-sickness medicines can contribute to falls, driving incidents, or other injuries. Confusion and urinary problems are more likely to be important in older adults or people sensitive to these medicines.

Frequent motion sickness may lead to avoiding travel, boats, work duties, or family activities. Planning seating and using preventive treatment can often make travel more manageable.

Prevention

Motion sickness cannot always be prevented. A person's underlying sensitivity may remain, even when particular journeys are managed successfully.

Before travel, being rested and choosing a seat with less movement may reduce the chance of symptoms. A light meal is often easier to tolerate than travelling with either an empty stomach or a very full stomach. Alcohol and sleep deprivation can worsen susceptibility.

During travel, facing forward, watching the horizon, keeping the head still, and avoiding reading or close-up screens can reduce conflicting sensory signals. On a boat, remaining on deck where the horizon is visible may help more than staying in a cabin.

If medicine is appropriate, it is generally most effective when used before the expected movement. The correct option depends on age, health conditions, other medicines, journey length, and whether alertness is required.

Repeated exposure sometimes allows the brain to adapt to a movement. This is called habituation . Adaptation is not guaranteed and may be specific to one kind of motion.

Living with it and what to expect

Motion sickness usually lasts only while the triggering movement continues. Improvement often begins soon after stable ground is reached, but nausea, fatigue, or mild imbalance may continue for several hours.

Susceptibility can change over time. Children often become less sensitive as they grow,

although some continue to experience symptoms as adults. Migraine, poor sleep, illness, or hormonal changes may make one journey worse than another.

People who travel frequently may adapt to a repeated pattern of movement. Sailors, for example, may feel better after time at sea. Symptoms can return after a break or during rougher, less predictable motion.

Planning can reduce the effect on everyday life. Useful steps include booking a lower-motion seat, allowing time for breaks, carrying water and a sickness bag, and deciding in advance whether medicine is needed.

Persistent rocking, dizziness, or nausea between journeys is not the usual long-term course. It may reflect another balance disorder, migraine, a medicine effect, or a condition called mal de débarquement syndrome, which causes continuing rocking or swaying after travel.

When to get medical help

Arrange routine medical advice if motion-related symptoms are becoming more frequent, are interfering with necessary travel, or are not controlled by practical measures. Advice is also appropriate before choosing medicine for a young child, during pregnancy or breastfeeding, or when you have other health conditions or take regular medicines.

Seek prompt medical help if:

Call emergency services for dizziness or vomiting accompanied by weakness on one side, difficulty speaking, loss of consciousness, severe chest pain, serious breathing difficulty, or symptoms after a significant head injury. These are not typical signs of motion sickness.

- Vomiting continues and you cannot keep fluids down
- Urination becomes very limited or other signs of dehydration develop
- Dizziness or imbalance continues well after the journey
- Symptoms happen when you are not moving
- There is new hearing loss, ringing in one ear, or severe ear pain
- Episodes include a new or unusually severe headache

Common questions

Why do I get motion sickness when other people do not?

People differ in how strongly their brain responds to conflicting movement signals. Age,

migraine, sleep, previous experiences, and the type of motion can all affect sensitivity. It is not a sign of weak willpower.

Why is motion sickness worse when I read in a car?

Your eyes see a page that appears still while your inner ear senses acceleration, turning, and bumps. Looking outside at the road or horizon gives your eyes information that better matches the inner ear.

Can I train myself not to get motion sickness?

Repeated, gradual exposure may help the brain adapt to a specific movement. This does not work for everyone, and adaptation to one setting may not prevent symptoms in another.

Do motion sickness wristbands work?

Research has not consistently shown that acupressure wristbands prevent motion sickness. They are generally low risk when worn comfortably, and some people report benefit, but they may not control significant nausea or vomiting.

Is motion sickness the same as vertigo?

No. Motion sickness is a response to movement and often causes nausea and general dizziness. Vertigo is a false sense that you or the surroundings are spinning. Vertigo without a motion trigger may need a separate assessment.

Why do I still feel like I am moving after a boat trip?

A mild rocking feeling for a short time can occur as the balance system readjusts to stable ground. Symptoms lasting several days, worsening, or affecting walking should be medically assessed.

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