

Seasickness and How to Minimize the Symptoms

Physiological or Psychosomatic?



Motion sickness is a condition that occurs when what we see doesn't align with what we feel. Symptoms may include nausea, vomiting, dizziness, headaches, sweating, and fatigue. It is generally understood that seasickness occurs when the inner ear, eyes and body send conflicting signals to the brain. In essence, the labyrinth (inner ear) is responsible for maintaining balance by detecting position and motion. If your body can no longer determine the location of the vertical plane (due to heeling) or the speed and direction that you are moving (bobbing of the boat and/or change of speed and direction during a tack) it sends a conflicting message to the central nervous system. Agitated by this perceptual incongruity, the brain responds with a cascade of stress-related hormones that can ultimately lead to nausea, vomiting, and vertigo.

Here are a few tips to help ease the symptoms of seasickness:

1. Maintain your fluid intake. Seasickness and related medications cause dehydration and headaches. Drink water, low acidity drinks (apple or carrot juice), or clear soup . . . avoid caffeine and alcohol.
2. Keep moving. Most people find that being busy keeps their minds occupied. Avoid close, focused work on computers, chart plotters, charts, etc. Ride the waves and focus on the horizon.
3. Stay on deck, fresh air is often needed for a quick recovery. Being below deck may worsen symptoms due to loss of a defined vertical plane.
4. Carry a plastic bag, being prepared may stave off symptoms. If you must vomit "over the side," first check the direction of the wind and waves. By using the leeward side of the ship, you will probably reduce the unpleasant experience spreading to others.
5. Consider the use of medications (prescription [Rx] or over the counter [OTC]) to prevent or minimize motion sickness. A dose is usually recommended about 3 or more hours prior to setting sail, and as needed at sea. These medications tend to be dehydrating, though, so drink plenty of fluid. **If you are currently taking prescription medications, consult a medical professional prior to taking any OTC medications.**
6. The use of homeopathic approaches has shown to also work and will most likely have fewer side effects.





Medications:

- Scopolamine transdermal patch [Transderm Scōp] (Rx Only) behind the ear – also known as hyoscine, or Devil’s Breath, is a tropane alkaloid and anticholinergic drug used to treat motion sickness. Try not to touch the bottom of the patch. Pupil dilation and blurred vision is associated with transferring some of the active medication in the patch to the eye. The most significant limitation is dosing of the medication. The patch is designed to deliver about 1mg of medication over a 3 day period. This “one size” fits all is not appropriate for all patients. A safe and effective dose has not been established in the pediatric population. The Transderm Scōp should be used with caution in elderly populations as well as with pregnant women, and nursing mothers.
- First Generation Antihistamines – First generation antihistamines (meclizine, dimenhydrinate, diphenhydramine, promethazine, cyclizine) have been shown to provide a benefit (see below). Second generations antihistamines (meclizine/Zyrtec and fexofenadine/Allegra) have not shown to be effective because they don’t cross the blood brain barrier. When it comes to seasickness, medications need to cross the blood brain barrier to have the appropriate mechanism of action.
 - Meclizine (Rx and OTC) – active ingredient in Bonine (among others), is an antihistamine used to treat motion sickness.
 - Promethazine (Rx and OTC) – active ingredient in Phenergan (among others) is an antihistamine, antipsychotic, sedative, and antiemetic used to treat nausea.
 - Dimenhydrinate (Rx and OTC) – active ingredient in a number of “Motion Sickness Relief” medications is an antihistamine that reduces the effects of natural chemical histamine in the body and is used to treat or prevent nausea, vomiting, and dizziness associated with motion sickness.

- “Coast Guard Cocktail” (Rx) – Is a combination of 25 mg of promethazine, which has effective anti-motion-sickness and sedative properties, and 25 mg of ephedrine (usually prescribed as pseudoephedrine), that acts as a stimulant. The combination has proven effective in reducing symptoms, both in aviation and nautical applications, but requires scripting by a medical professional. Due to the use of pseudoephedrine, this would not be the choice for anyone currently under treatment for hypertension or other cardiac conditions.
- Ondansetron (Rx) – Sold under the brand name Zofran (among others), acts on the serotonin receptor, and is commonly used to treat nausea and vomiting. While it may not prevent the onset of seasickness, it may help to relieve the symptoms of nausea and vomiting.
- Homeopathic
 - Ginger root – Ginger Ale, Ginger Chews, ginger capsules (500-1000mg every 6 hours) are commonly available at most convenience and grocery stores.
 - Motioneaze™ – Is a highly concentrated blend of herbal oils [lavender, peppermint, frankincense, chamomile, myrrh, ylang-ylang and birch] that is applied to and absorbed through the skin just behind each earlobe.
 - Ear Plug – The use of an ear plug placed in the non-dominant ear (left ear for a right-handed person, right ear for a left-handed person). After inserting the ear plug, it has been reported that nausea was diminished significantly.
 - Other devices that use acupressure (Sea-Bands), electrical pulses (Acustimulation Bracelets like reliefband® and Motioncure Neck Brace) and anti-motion glasses have mixed results in clinical studies. Some individuals have found them useful in reducing nausea.
- Returning to port – In extreme cases . . . returning to land may be the only viable alternative.

What works for one individual may not work for someone else. It may take a period of “trial and error” to find the best solution.

98% of the public will show some symptoms of seasickness so you are not alone. If you do get seasick, take comfort in the fact that recovery is only a matter of time, and the survival rate is 100 percent! After spending 3 to 4 days onboard a boat, symptoms will most likely become less frequent and may subside completely for the balance of your voyage. Sensible eating, good hydration, and some patience are all that are usually required to get past a bout of seasickness.

Capt. John Miller

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