

# How to Avoid Becoming Seasick

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Fear of seasickness keeps many a would-be sailor home on the couch. Unfortunately, some of us sailors who don't fear seasickness enough sooner or later find ourselves hanging over the rail, wishing we were home on the couch. This article addresses basic questions on this malady that has plagued sailors around the world since humans first went to sea.

## ***What is seasickness?***

“Nausea” in Greek means seasickness (‘naus’ means ship). According to the American Sailing Association (ASA), “Seasickness, in layman’s terms is confusion within the brain, caused by contradictory signals between the inner ear and the eyes. The inner ear which controls our sense of physical balance recognizes motion which the eyes may not. The results of this confusion are fatigue, dizziness and nausea.”

## ***Who gets seasick?***

American Sailing Association’s *Cruising Fundamentals*: “anyone could fall victim to the disease under the right (or wrong) circumstances.” The research paper, *The Medical Aspects of Harsh Environments* elaborates on this a bit further:

“The incidence of seasickness (among sailors) varies between a fraction of 1% to 100%. It depends primarily on the intensity of the motion stimulus and the extent to which those aboard the vessel are adapted to the motion. The motion stimulus is function of the state of the sea and the size of the vessel and its sea-keeping properties.”

A study done for Canada’s Public Health Agency by the Committee to Advise on Tropical Medicine and Travel (CATMAT) titled “Statement on Motion Sickness” reported: “Rates are higher among females than males (1.7:1) and increase during menstruation and pregnancy.”

## ***So is there some type of boat that I can’t get seasick on?***

Sure... one in dry dock. Some boats are more ‘sea kindly’ or have better ‘sea-keeping’ than others. That is, they have less seasickness-inducing motion. This is a factor of many things, including the design, size, weight, and loading of the boat. In general, larger boats may have a less motion as their waterline and weight tends to even out the motion of seas.

Some claim that catamarans are seasickness proof. But my good friend Hideko, who has been sailing around the world for the last 2 years with her husband on a modern 50 foot cat, is one of many who disprove that. She is still seasick almost every time they weigh anchor, sometimes for many days.

### ***What can I do to avoid getting seasick?***

Start out well-rested; you can reduce your chances of becoming seasick by getting plenty of sleep the night before you go sailing.

Eat bland foods before going out. Avoid greasy, heavy foods, alcohol, acidic beverages like citrus. Do not skip eating but also do not overeat. The Cleveland Clinic warns: “Do not drink large amounts of alcohol the evening before you travel: Alcohol speeds up dehydration and generally lowers your body’s resistance to motion sickness, if you are prone to it.”

On board, focus on getting lots of fresh air and avoid excess time below deck. Illness rates can be increased by poor ventilation, fumes such as diesel fuel, gasoline, carbon and monoxide, and unpleasant aromas.

You can also reduce the motion that your body experiences by staying near the center of motion of the sailboat, which is generally near the center of the boat. There is also less motion lower in the boat, but the loss of fresh air and view of the horizon tend to outweigh the benefits of going below if you are seasick. If you must go below, or into an enclosed cabin, try to keep your eyes closed to reduce the visual stimulus. This helps to reduce the confusion to the brain mentioned above, which is why it’s best to also avoid reading, doing chart work, watching a compass, or focusing on anything moving with the boat that your brain will misinterpret as ‘fixed’.

There are also a variety of motion sickness medications which will be reviewed in the fourth article in this series. Consult your doctor for advice on what is appropriate for you, including consideration of side-effects such as drowsiness on your ability to safely command or crew a boat.

### ***Can I develop immunity to seasickness if I sail enough?***

Yes and no. The CATMAT study reported

“Over time, there is a tendency to adapt (“to get one’s sea legs”). For most individuals this occurs by 2 to 3 days, although about 5% are said not to adapt and to remain symptomatic if the stimulus persists.... Personal susceptibility tends to be a stable and enduring characteristic, and does not diminish with recurrent exposure.”

In other words, most people acclimate after 2 or 3 (continuous) days at sea, but some never do. But as soon as you get off the boat, your body ‘resets’ to its original sensitivity to seasickness, so you start all over again the next time you go sailing.

### ***How do I know if I am getting seasick?***

Early warning signs can include drowsiness and yawning, perhaps burping and/or headache. It may progress to pale skin, a cold sweat and the onset of nausea. Seasickness often causes emotional changes as well, and you may find yourself beginning to feel depressed and apathetic.

### ***Once I start to get seasick, how can I recover?***

Admiral Nelson, the 19<sup>th</sup> century British hero at Trafalgar, is said to have advised seasick sailors, “You’ll feel better if you sit under a tree.” Not surprisingly, victims of seasickness often fail to find the humor in this. But the point is, once you start to become

sick, there are a few things you can do that may help a bit, but no reliable ‘cures’ other than going ashore.

Even seasickness medications (if you can even keep them down) that may be effective in preventing seasickness may do little to cure seasickness after onset. American Sailing Association’s *Cruising Fundamentals* notes, “Remember on the day of departure that most of these medications are intended to prevent rather than cure sea sickness. They must be in your system prior to departure to have their intended effect”

***What should I do once I am seasick?***

If you do start to feel sick get on deck for fresh air and to watch the horizon to calm your sensory system. Steering the boat helps many people feel a bit better. Perhaps this is because it puts them in a part of the boat with lots of fresh air, focuses their eyes on the horizon, and challenges the feelings of apathy and depression that tend to accompany seasickness. If you are able to stomach eating something, nibble on bland food, especially something low fat and high starch. Crackers, such as Saltines, are a traditional favorite.

If you feel you are going to vomit, go to the leeward rail of the boat. This way anything that comes up will be blown away from you, the boat, and your crewmates. Otherwise, the ‘unpleasant’ sights and smells may trigger a similar response among your crewmates who may join you at the rail.

If you are getting sick, DON’T go into the head! First of all, the enclosed space and the odors will only make you much sicker. Secondly, if you are embarrassed about vomiting at the rail in front of your crewmates, be assured that their estimation of you will be much higher than if you ‘redecorate’ the walls and floor of the shared head!

Congratulations! You’ve recovered from your seasickness. But you notice the crewmate sitting next to you looks a bit pale and clammy.

***What can I do if I think one of my crewmates may be becoming seasick?***

Watch for crewmates that look a bit pale, perhaps a bit stiff and yawning, or unusually withdrawn or moody. They may break into a cold sweat. Check in with them to see how they are feeling. Often people don’t want to volunteer the fact that they are feeling seasick, as though it were some sore of character flaw. Let them know that it is nothing to be ashamed of. Encourage them to watch the horizon, and to steer if they are able. Offer to fetch things from the cabin from them so they don’t have to go below, including warm layers and water to drink.

Discourage them from going below into the head, not only because it will make them sicker, but because they may barricade themselves in so that it’s difficult to monitor their condition or assist them.

Encourage them to move to an area in the center of the boat, which will have less motion than the bow or stern. If they are very sick, have them lie on their backs, but protect them from the sun. Also, help them to avoid areas with poor ventilation, odors, fumes, smoke, and carbon monoxide, as these tend to contribute to seasickness.

Complications are infrequent but include hypotension, dehydration, depression, and panic.

### ***What should I do if they start to vomit?***

If they start to vomit, help them find the leeward rail. Keep a close eye on them as in their state they are a heightened risk for falling overboard. Try to get a lifejacket and/or harness and tether on them, especially if the seas are rough. Consider getting them a bucket to use if possible, so that they don't have to lean over the rail when they are already feeling dizzy.

Be ready with fresh water for them to re-hydrate and rinse their mouth with, paper towels to clean their skin and clothes, a bucket to rinse the deck. But be careful to take care of yourself, lest their vomiting triggers a similar response in you. You can't help them if you also become sick!

According to the research paper *Medical Aspects of Harsh Environments*, unlike ordinary sickness, vomiting in motion sickness tends not to relieve the nausea. Therefore, the seasick individuals may continue to vomit until they become dehydrated. So, at appropriate points, encourage them to drink small amounts of water, and eventually electrolytes if they are sick for an extended period.

### ***Why do they seem so apathetic and depressed? Should they continue to work?***

The emotional/psychological impact of seasickness is often as important as the physiological impact. American Sailing Association's *Cruising Fundamentals* notes, "during a severe bout of this illness very little else matters, not finances, not romance, not even life itself." More specifically, Rolnick and Gordon in 'The Effects of Motion Induced Sickness on Military Performance' describe:

"...a helplessness reaction, which causes a decrement in performance through cognitive, emotional, and motivational deficits. Support for the dissociation of the nausea and depressive components of the motion sickness syndrome is afforded by the finding that decrement in performance at sea was not correlated with physiological signs of seasickness but was significantly correlated with feelings of helplessness."

In other words, the physical symptoms of seasickness may not prevent a crew member from doing their job (though it's hard to drive a boat or trim a sail while you are vomiting!) But in addition to the physical symptoms such as nausea, seasickness often causes apathy, depression, and a feeling of helplessness which cause seasick crew to function poorly. Therefore, if possible it's best to (diplomatically) relieve sick crew of any responsibilities critical to the boat's safety. At the same time, do what you can to offer them emotional support and encouragement. If you've ever had *mal de mer* yourself, you should be well qualified to offer empathy!

### ***What is the best seasickness medication?***

It's impossible to identify a single medication/treatment that is best for everyone for several reasons:

1. Both the conditions that lead to seasickness, as well as the response to various medications, vary widely among individuals. None of the regimens is effective for everyone under all circumstances. What works for your crewmate may not work for you.
2. Potential side effects, and their implications, vary among individuals. Some medications can exacerbate conditions like heart disease, hypertension, asthma, glaucoma, depression, and others. Even if two individuals experience the same

side effect, the implications may be very different between them. For example, drowsiness and difficulty concentrating, which is a common side effect of several drugs, may not be a problem for someone on a boat who is just a passenger, able to sleep through the whole voyage. But they would be dangerous to a skipper responsible for navigation and decision-making!

3. Most of these drugs are recommended to women who are pregnant or breast-feeding, or to children.

For these reasons, you should consult your doctor before selecting a seasickness medication.

### ***What are some of the alternatives for seasickness prevention?***

There are basically 4 alternatives:

1. Wrist bands, including over-the-counter products like Davis Queez-Away acupressure bands and Discoverer Relief electrical stimulation bands
2. Natural remedies, such as ginger
3. Antihistamine drugs, such as Bonine, Dramamine, and Stugeron
4. Scopolamine drugs, such as the Transderm Scop patch

There are sailors out there who swear by each of these. But for each there are also sailors who find them to be no help. A study done for Canada's Public Health Agency by the Committee to Advise on Tropical Medicine and Travel (CATMAT) titled "Statement on Motion Sickness" stated that studies on the effectiveness of the first two groups (wrist bands and ginger) tended to be contradictory and inconclusive. The study also noted that while the drugs (alternatives 3 and 4 above) seem to be relatively effective, it is not clearly understood how these drugs work: "Despite intensive study, their site(s) of action remains poorly defined, and their effectiveness does not parallel their receptor-blocking potency."

### ***What are the most common seasickness drugs that sailors use?***

Four of the most common drugs are outlined below. The January 2009 issue of Practical Sailor (PS) has an excellent article discussing their survey of dozens of the most experienced offshore sailors on their experience with these, and other, seasickness meds.

**Meclizine** (Sold over the counter as Bonine, Dramamine II, Antivert) is very popular. Though many people complain of moderate drowsiness, it doesn't seem to have the serious side effects of most other drugs, and is effective for many people. 27.3% of the users surveyed by PS found this drug to be ineffective, and 10.5% of the total respondents would recommend it.

**Dimenhydrinate** (Sold over the counter as Original Formula Dramamine, among others) is rarely used by experience sailors. This is because, while many find it effective, it tends to cause extreme drowsiness which is not suitable for someone standing watch. 33.3% of the users surveyed by PS found this drug to be ineffective, and none of them would recommend it.

**Cinnizarine** (marketed as Stugeron) Many experienced sailors prefer Stugeron as it tends to both cause less drowsiness and be more effective for a larger percentage of sailors than the other antihistamines. However, it has the potential for serious long-term side effects which should be considered, and it is not sold in the U.S. Additionally, the dosage that is sold in many other countries, such as Mexico, is intended for other disorders and so is as much as 5 times higher than

recommended for seasickness. Only 4.3% of the users surveyed by PS found this drug to be ineffective, and 57.9% would recommend it.

**Hyoscine** (marketed as the Transtern Scop patch, and less-known Scopace pill). Unlike the 3 antihistamines above, this is an anti-cholinergic drug. It is available only by prescription. Hyoscine seems to often be more effective than the antihistamines, but also have greater potential for serious side-effects. The CATMAT study warns, “Scopolamine can cause confusional states and/or visual hallucinations...” Not the sort of thing you want standing watch! So while only 8.3% of the users surveyed by PS found this drug ineffective, none would recommend it.

Again, you should consult your doctor before selecting any of these medications.

***How long before we leave the dock should I start taking the medication?***

Common seasick medications take effect from about 1-2 hours for drugs like Bonine and Dramamine, to 6-9 hours for the Transderm Scop patch. The CATMAT study warns against trying to cut these times short:

“Oral regimens must be taken before the exposure, both to allow absorption and to attain adequate levels of the medication. Regimens are usually considerably less effective once symptoms of motion sickness have begun. With the onset of symptoms absorption becomes less effective, and with vomiting becomes close to impossible.”

***Where can I go for more information?***

You can find more information on the pharmaceutical companies' websites. Be sure to consult your physician, especially if you use any drugs listed as having potential interactions, or have any condition listed as a complication.