It Can Happen to Anyone…

The English words "nautical" and "nausea" derive from the same Greek root ***naus*** = ship, and for good reason. People have been getting seasick for thousands of years.

While seasickness is miserable and can be debilitating, it can be prevented and even treated. Researchers at universities, research institutes, and navies of many nations have studied seasickness and motion sickness, and reliable information from those studies is presented in this brochure.

What Is Seasickness?

Seasickness is an unpleasant condition that may include dizziness, tiredness, acid stomach, and nausea/vomiting. It usually comes from rhythmic motion of sea waves. People rarely get seasick from bouncing as a small boat skips over the sea—it's the slower motion of natural waves that does it.

Seasickness occurs when the visual, **vestibular** (inner ear), and **proprioceptor** (receptors in the muscle and joints that signal locomotion and posture) systems are in conflict with each other or not consistent with past experience. The subconscious brain incorrectly interprets the distress caused by this motion as the result of poisoning, and causes stomach disturbance leading to vomiting.

Seasickness has two components: the distress (dizziness and nausea) experienced by the brain, and the stomach's reaction to it. You can have one without the other. Folk remedies that soothe the stomach do not stop the nausea's root cause, which is in the brain.

Some believe that seasickness results from a conflict between what the inner ear detects and what the eyes see. If this were the whole problem, it could be prevented or cured by keeping an eye on the horizon outside the boat. This works for some people, but not for the majority.

How to Predict Seasickness

Seasickness can strike anyone, including seasoned professional mariners. Most people get over it in a few days if they are at sea that long, but knowing this is little comfort if your fishing trip is spoiled.

Try reading, while riding as a car passenger in stop-and-go traffic or on winding roads. If you get carsick in this test, there's a good chance you'll get seasick.

Summary

- Anyone can get seasick. It won't kill you, but for a while you may wish it would.
- If you've had motion sickness before, plan ahead and take an OTC drug before embarking. Or get a prescription for scopolamine or another powerful antiemetic (antinausea) drug.
- Use an alternative remedy, if you think it will work.
- If you take a drug you have not had before, "test drive" it ahead of time for effectiveness and side effects.
- On the boat, position yourself to minimize the effects of boat motion.
- If you start to get sick, be considerate of others. If a companion gets sick, protect him/her from injury or falling overboard. Give fluids.
- If seasickness strikes, try the chew-but-don't-swallow technique to treat symptoms.

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SG-ED-47 2005

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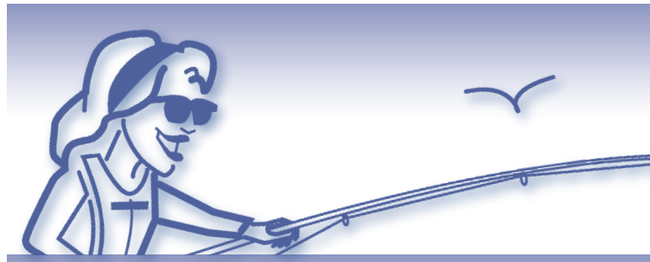
Preventing and Treating SEASICKNESS



To Prevent Seasickness or Ease Symptoms

The night before:

- Eat and drink moderately.
- Take an advance dose of medicine (see "OTC Drugs" section).

The morning of the voyage:

- Eat only a light breakfast, avoiding rich or fatty foods.
- Go easy on the coffee.
- Take a second dose of drugs.

On the boat:

- Take a position with a good outside view, low and near the center of the boat if possible.
- Avoid smells of exhaust, fuel, the galley, and the head (toilet).
- Avoid reading or work requiring close-up focus (like tying gear).
- Move around and get fresh air.
- Avoid alcohol and tobacco.

If you start feeling sick:

- Acknowledge the situation and tell the captain or crew.
- Avoid going below or into enclosed spaces

If you think you're going to throw up:

- Vomit over the side, on the downwind side, or in the head. Be considerate of others on the boat.
- Many people feel much better after vomiting.

If your companions are seasick:

- Protect them from injury or falling overboard.
- Encourage them to drink water or sport drinks to avoid dehydration and to keep up essential electrolytes. Children are especially susceptible to dehydration.

Alternative, Folk, and "Natural" Remedies

Many people don't want to use drugs to prevent or cure seasickness, so they use alternatives. Most of these alternatives have not proven effective in clinical trials, but some users report success:

- **Ginger**, as powdered or candied root, cookies, tea, or ginger ale, soothes the stomach of many sufferers.
- **Acupressure,** on the *nei kuan* or precordial #6 position on the inside of the wrist, prevents nausea in many people. Elastic wristbands with plastic beads that press on the wrist are sold for this purpose.
- An electronic device that resembles a wristwatch and sends a mild, user-variable, electric current into the wrist (at the ***nei kuan*** position) can prevent seasickness or stop it after it has begun.

There's no harm in trying alternative remedies, and they may be all you need. But most seasick-prone people need drugs to prevent the symptoms.

Prescription Drugs

The transdermal scopolamine patch, sold by prescription, is very popular among recreational boaters and professional mariners. For most people the side effects are minimal, the patch is convenient, and it lasts up to three days. Scopolamine works well for most people, but should be used only under a doctor's supervision.

Most other prescription drugs for seasickness are used only by the severely affected. They are taken as a pill, injection, suppository, syrup, or salve. Some are quite potent, and side effects can be serious or even life-threatening.

OTC Drugs

Most over-the-counter (OTC) drugs for prevention of motion sickness are based on antihistamines. They work by depressing the brain's emetic or vomiting center. They are moderately effective and have minimal side effects, including drowsiness and dry mouth.

Drugs based on meclizine (Bonine, Antivert, Dramamine II) cause less drowsiness than the old standard drug, dimenhydrinate (original Dramamine, Triptone, Gravol). Diphenhydramine (Benadryl), an antihistamine also used as a sleeping pill, can cause significant drowsiness.

Using OTC Drugs Effectively

Most dimenhydrinate- and meclizine-based drugs are sold as pills or as chewable tablets. They should be taken at least two hours before boarding so the drug can go through the digestive system and into the bloodstream. A person already nauseous or vomiting will get no benefit because the drug will be expelled in the next bout of vomiting, or will be trapped in the stressed digestive system. OTC drugs are useful for preventing seasickness, but not for curing it.

It is essential to get the drug into your system in a sufficient amount, which varies with a person's size and body chemistry. Some people need to exceed the recommended dose, while others cut it in half. Further, some OTCs lose effectiveness in 4-6 hours. You might want to "test drive" a drug ahead of time (well before you go boating) for effectiveness and side effects.

A second component of drug effectiveness is faith in the drug. Studies show that as much as 40% of all seasickness can be alleviated by the belief that the drug is effective, even if the patient has taken a sugar pill (placebo) instead of the real thing.

Here's Something to Try

Too often people don't think they will get seasick until they get out on the water, and then it's too late to take an OTC drug as a preventative. If you're one of those, here's something you can try. Next time you go out, take along a package of chewable dimenhydrinate or meclizine tablets. If you find that you're starting to feel sick, take a couple of the tablets and chew but don't swallow. Instead, hold the "mush" under your tongue or against the inside of your cheek, where the drug can be absorbed through the lining of the mouth. Research shows that the drug passes into the bloodstream, although it still takes a couple of hours to reach full strength. Some sufferers report excellent results from this approach.

Common Medications for Motion Sickness

	FORM	DURATION
Over the counter[a]		
Dimenhydrinate		
Dramamine	Tablet, chewable, liquid	4-6 hr
Gravol[b]	Capsule, suppository	4-6 hr
Triptone	Tablet	4-6 hr
Cyclizine		
Marezine	Tablet	4-6 hr
Meclizine		
Bonine	Tablet, chewable	6-12 hr
Antivert[c]	Tablet	6-12 hr
Dramamine II[d]	Tablet, chewable	6-12 hr
Prescription only		
Scopolamine		
Trans-Derm Scop	Skin patch	48-72 hr
Scopace	Tablet	4-6 hr
Scopolamine Gel	Gel	8-12 hr
Cinnarizine[e]		
Stugeron	Tablet, capsule, liquid	6-12 hr
Antimet	Tablet, capsule	6-12 hr
Promethazine		
Phenergan	Tablet, injection, suppository, liquid	6-12 hr
Prochlorperazine		
Compazine	Capsule, injection, suppository, liquid	4 hr
Ondansetron		
Zofran	Several forms	4 hr
Prescription drug combinations		
Scopolamine + dextroamphetamine[f]		4-6 hr
Promethazine + ephedrine or pseudoephedrine[g]		6-12 hr

[a] May also be available in more potent prescription forms.
[b] Gravol is not available in the U.S.
[c] Antivert is a prescription drug.
[d] Dramamine II causes less drowsiness.
[e] Cinnarizine is not available in the U.S.
[f] Dexedrine is dextroamphetamine.
[g] Sudafed is pseudoephedrine.