Water Transportation Meeting Kit

WHAT’S AT STAKE

Water transportation is an activity to transfer persons and cargo using a variety of freighters or carrier ships in terms of size and transportation process in water surface such as river, canal, sea, lake, and ocean.

A water transportation worker is sometimes called a merchant marine and they can hold a variety of other titles. Titles include captains, mates, deck officers, mariners, sailors, marine oilers, ship engineers, deckhands, and motorboat operators. All of these positions maintain and operate vessels and travel to and from domestic ports along the coasts, the country’s inland waterways, and could also travel to foreign country ports.

WHAT’S THE DANGER

HAZARDS OF WATER TRANSPORTATION – PHYSICAL, CHEMICAL, BIOLOGICAL, PSYCHOSOCIAL

Water transportation workers face a variety of unique work hazards. **Physical hazards** include noise levels, vibration, ultraviolet light exposure, line handling, heavy lifting, slippery surfaces, steep ladders, and narrow passageways, and can be exacerbated by severe weather conditions. **Chemical hazards** include exposures to chemical cargos, fuel, cleansers, and diesel exhaust. **Biological hazards** include transmission of contagious diseases between coworkers and travel-related infections. **Psychosocial hazards** remain a significant challenge, including social isolation, language barriers, circadian rhythm disruption, substance abuse, low job control/high demand, harassment/bullying (43% prevalence in Nautilus study), and the fear of piracy internationally. Additionally, the months-long assignments with

restricted shore leave raise the possibility that workers could face decreased or delayed access to medical care.

Operational Hazards

Operating on water, you are exposed to the sun, wind, and weather. Wear layers of clothing to regulate your temperature and sun exposure. Sturdy work boots protect your feet from getting crushed by heavy gear. A slip resistant sole helps you stay on your feet while working on a wet and moving surface. Consider a heel on the boot to assist with climbing ladders. Slips, trips, and falls can be serious on a boat. Besides a scrape, sprain, or fracture from a fall, you could end up overboard. Keep work areas clear of standing water.

HOW TO PROTECT YOURSELF

WATER TRANSPORTATION SAFETY MEASURES

Water transportation workers are gone for long periods of time, work in all kinds of weather conditions and have long working hours.

- To do your job tasks safely; ask if you have questions. Wherever water and electrical systems meet, take extra precautions to prevent electric shock. If you use paint, cleaning, or other chemicals, know the chemical properties and hazards of these materials. Use extreme caution when fueling or working around fuel tanks or lines to avoid fires and explosions.
- Watch for confined spaces onboard, and safely plan the job before you weld, grind, or conduct other hazardous work. Use caution around ropes, moving machinery, and equipment. Keep guards in place to prevent accidental entanglements. Practice good housekeeping with ropes and lines to prevent severe injuries. Maintain your fitness and use good ergonomics for lifting tasks and the agility to move through tight and moving spaces. Avoid awkward postures during work tasks and lifts.
- Follow safe boating practices by keeping a weather eye out,

monitor weather before and during your trip. Know what type of weather your vessel (and its cargo) can handle. Keep updated charts and know the operating and navigational rules of the waters you work. Know your boat and its capacity and load rating, load, and store materials in a compliant and safe manner.

- Sun and water ensure there is always plenty of maintenance required on water vessels. Perform equipment inspections and maintenance on schedule so you don't break down. Carry plenty of fuel, tools, and spare parts onboard in case of a breakdown or emergency. Test your communication methods. File a float plan before you leave so someone onshore knows where you will be and when you are expected back.
- In an emergency on the water, you may have to rely on your own resources and training, depending on your location and the circumstances. Have the correct number of life vests, immersion suits, rafts, etc. onboard. Keep them accessible and in good working order. Carry enough food, water, and first aid supplies to sustain all of the passengers in an emergency. Everyone onboard should know the emergency procedures and the location of emergency supplies. Learn about hypothermia and how to maximize your water survival and rescue. Practice safety drills if necessary.

WRITTEN EMERGENCY RESPONSE PLAN WORKING ABOVE OR ON WATER

A written emergency response plan appropriate to potential emergencies should include when work is done on or above water. A transportation plan needs to be reviewed with involved workers and contractors at least 48 hours before work begins. An emergency preparedness plan, has the following considerations:

- location of the work
- nature and type of work being done.
- type of body of water (e.g., are there tides? currents? how deep? water temperature? etc.)
- what measures are in place to protect workers from falling.
- how many workers
- work schedules

- weather
- transporting workers and equipment
- what work platforms, boats, etc. will be present
- procedure to be followed when a worker has fallen in the water (e.g., type of boat, equipment needed, first aid procedures, etc.)

PREPARATION FOR TRANSPORTATION EMERGENCIES – REQUIRED TRAINING

- an appropriate number of workers are to be trained for rescue operations.
- workers are designated to perform the rescue tasks.
- workers are informed about appropriate rescue procedures.
- workers are trained in rescue procedures and use of rescue equipment.
- workers need to be trained in cardiopulmonary resuscitation (CPR) and first aid.

Rescue equipment include:

- life buoy.
- boat hook.
- lifeline.
- life jackets, for each of the rescue crew.
- audible alarm.
- adequate boat for a safe and timely rescue.

FINAL WORD

Education and training requirements vary with the type of job. There are no educational requirements for entry level sailors. Other types of water transportation workers complete coast guard training programs.