

The weather has an influence on the safety of the crew on board. Certainly, during the winter, fog, snow and frost have a negative influence. In addition, the days are shorter which affects sight and fatigue of the crew. Below possible dangers and measures that can be taken are listed. Also watch our two videos about this: [Ice and Snow in the Locks](#) and [Snow on Deck](#).



POSSIBLE DANGERS

- Falling ice from bridges, locks, ships, etc.
- Falling into cold water can cause for a shock and freezing, wearing a lifejacket is therefore of even greater importance.
- Vents of ballasttanks can freeze and therefore cause for damage to the barge.
- Bigger chance of slipping, tripping and falling because of slipperiness.
- Slipperiness on stairs.
- Ice can influence the course of the barge and make maneuvering more difficult.
- Thick floes can cause for damage to hull, bow thruster, and rudders.
- Water in the ballasttanks can freeze and defrost which can have an influence on the stability.

MEASURES

- Walk calmly and use the anti-slip paths, keep the paths clear from snow and ice and mark them clearly, strew salt in case of snow.
- Wear appropriate PPE and wear them correctly (footwear against slipping, helmet against falling ice, lifejacket against drowning, winter clothing against freezing).
- Make sure there is enough lighting on deck.
- Rotate the crew more often when they are working in the cold.
- Discuss the hazards, measures and relevant emergency procedures with the crew and any visitors.
- Spray locks with graphite.
- Check heating systems on proper functioning; do not shut off heaters.
- Cover anchor winch, ropes and wires and keep coverplates of hawse pipes ice-free.
- When at locks, go to the front early. Pay attention at locks with a 'lift door', icicles can fall down when passing under.
- Start the engines early on and let them get to temperature.
- Tap pumps, pipes, hoses and watertaps and protect them against freezing.
- Keep bilges in holds and engineroom(s) empty.
- Check engines with closed cooling water systems on anti-freeze.
- Keep batteries filled and under voltage.
- Keep fuel tanks and lubricant oil tanks that are against the hull as full as possible (condensation).
- Check before loading/discharging the loading pumps on flow and check the clocks on rotation considering freezing.
- Be sure that there is enough fuel in case there is a delay underway or when loading/discharging is prohibited because of ice.
- Local authorities can enforce convoy sails on certain waterways. Make sure to be aware of the latest local guidelines as well as your predecessor.
- Take into account that there are more passenger vessels. Communicate clearly with all vessels.
- Add to additives to diesel fuel in deck engines/day tanks to prevent solidification of the paraffin in the diesel fuel.
- Do not force anything when fixing things, the material (steel, brass and plastic) can get brittle.
- Thick ice can cause damage in the hull. Regular monitoring for leaks from engine rooms, cargo tanks, etc. is recommended.

References/Sources:

Several sources in the industry.