

IMCA Safety Flash 20/15

December 2015

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learnt from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat (imca@imca-int.com) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links. Additional links should be submitted to webmaster@imca-int.com

Any actions, lessons learnt, recommendations and suggestions in IMCA safety flashes are generated by the submitting organisation. IMCA safety flashes provide, in good faith, safety information for the benefit of members and do not necessarily constitute IMCA guidance, nor represent the official view of the Association or its members.

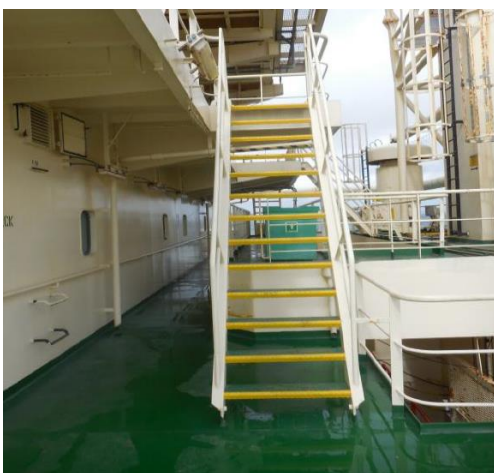
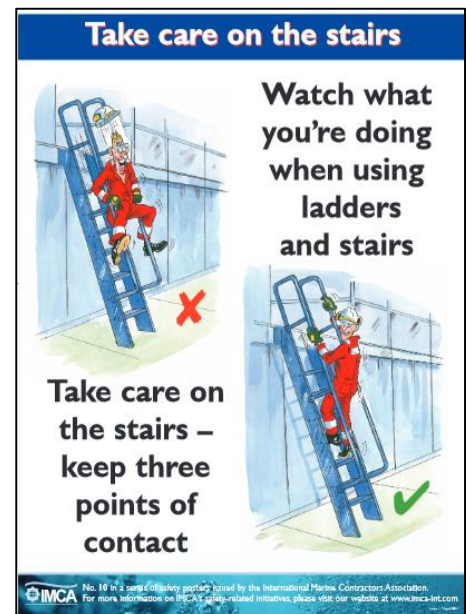
Focus: Slips, Trips and Falls

I Recent Slips, Trips and Falls Involving Stairs

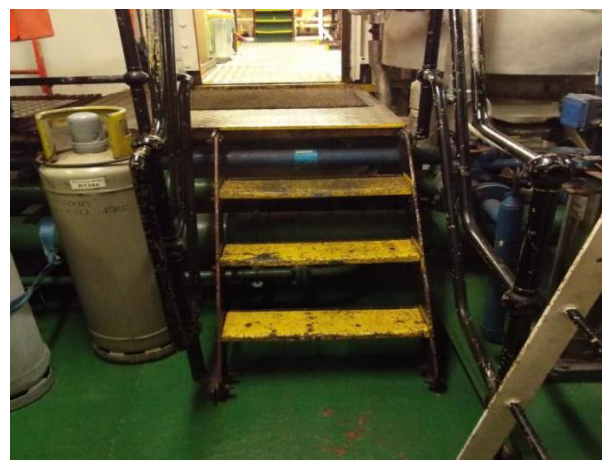
A member has reported an increase in the number of reported incidents involving gangways and stairs. This safety flash serves to raise awareness and to highlight the serious incidents involving slips, trips and falls on gangways and stairs on offshore vessels and installations.

Our member noted the following:

- ◆ Anti-slip products can become ineffective due to contamination - contamination can be classed as anything that ends up on a step, such as oil, grease, dirt, and dust;
- ◆ There was poor hazard awareness and risk perception of the routine task;
 - Injured persons failed to identify poorly positioned handrails when obstructed by objects such as cables, cable trays and box sections
 - Injured persons failed to identify handrails which were not at the recommended height, thus forcing personnel to lean forward during descent
 - There was a lack of consideration for the environment - weather, noise, humidity, condensation, lighting and vessel movement.



On these stairs, someone slipped on the second step whilst descending and came to rest at the bottom of the stairs, injuring his elbow.



On these stairs, a person reached the bottom step, and his left foot slipped from the tread, landing heavily on the deck injuring his foot.



On this gangway, a security guard missed a step when making his way up the gangway. He then experienced pain and swelling to his left leg.



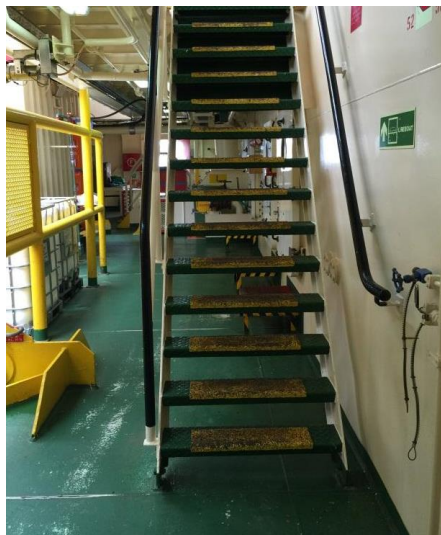
Here an employee stepped on the hinge of the gangway access ramp when it buckled.



A crewman lost his footing and slipped down an entire flight of stairs (illustrated). As he neared the bottom his right knee struck one of the stanchions of the hand rail, causing the knee to dislocate and fracture.



Whilst descending a flight of stairs a crewman lost footing and slipped, fell forwards and landed face forward on the deck below, suffering a compression injury to the right knee. The right-hand image below shows (staged) the position of the injured person after the incident. This incident was a Lost Time Injury (LTI).



Someone was coming down these stairs when their foot slipped on the fourth step up from the main deck. This caused the person to slip down the stairs and land on their bottom on the deck bumping the left arm in the process.

Our member further noted:

- ◆ Personnel were not using handrails when ascending or descending stairs – they should be holding handrails at all times;
- ◆ Suitable footwear should be worn as this can play an important part in preventing slips, trips and falls – use appropriate footwear and ensure they are properly secured at all times;
- ◆ For some, safety only becomes an important consideration when they are doing what they perceive as a “dangerous” job or task. They may consider that safety procedures can be bypassed or ignored when the task is simple, small, routine and presenting seemingly little risk of injury. Unfortunately, this type of thinking is why many routine activities can end up resulting in incidents and injuries;
- ◆ All worksite stairs should be kept free from hazards through effective planning, risk assessment, inspection and housekeeping;
- ◆ All the incidents described here were wholly avoidable. Luckily many of these cases resulted in minor injuries; however the potential was there for a more severe injury to have been sustained.

The following conclusions were drawn about causes:

- ◆ Stairway falls are usually caused by a combination of factors. Falls may be influenced by stair design, stair maintenance, the environment, and the characteristics of the stair user (age, gender, physical fitness) or their behaviour;
- ◆ Control measures to help reduce stair fall occurrence could include:
 - Regular housekeeping, maintenance and inspection – these are important to reducing the likelihood of stair fall;
 - Features such as handrails, colour-contrasting anti-slip products and adequate lighting – these will improve the stairway environment;
- ◆ People or Human Factors - how people act and behave in their work environment – fatigue, loss of concentration, horseplay and low risk perception can play a major part in these preventable incidents.

The following actions were taken:

- ◆ A full and thorough inspection of passageways, designated walkways, stairways and landings:
 - For actual damage – any necessary repairs to be made immediately
 - To determine whether or not there is a requirement for anti-slip products
 - To ensure that handrails are in good condition without any physical damage and adequately secured
 - To ensure that handrails can be held continuously without the user encountering obstructions, such as cable trays, light fittings and box sections
 - To ensure that all stairwell lighting is checked for any broken or malfunctioning lighting which should be repaired or replaced;
- ◆ In general, all the above inspection and maintenance of passageways, designated walkways, stairways and landings should be captured as part of the planned maintenance system.

Members may wish to refer to the following incident (search words: *stairs*):

- ◆ [IMCA SF 06/15](#) – Incident 5 – *Badly sprained ankle resulting in LTI.*

Members should be aware that IMCA publishes a wide range of safety promotional material, including the following poster:

- ◆ [IMCA SPP 10](#) – *Take care on the stairs.*

2 Crewman Falls Down Open Hatchway During Simultaneous Operations

A member has reported an incident in which a crewman was slightly injured when he fell down an open engine hatch on an offshore renewables industry Crew Transfer Vessel (CTV). The incident occurred whilst the vessel was in port and the crew were conducting maintenance activities on board. The Master and crewman of the CTV were both working on the back deck. The crewman was sanding the transom of the vessel in preparation for painting; the Master was working in the opposite engine bay conducting monthly maintenance and cleaning activities. As the crewman worked towards the open hatchway sanding the bulwark, he turned around without looking and misplaced his foot. He positioned his foot over the open hatchway and as a result fell down the open engine hatch landing on his ankle causing it to twist. The twist was minor and after a short break and a personnel assessment of the injury, he was able to continue working.

Subsequently, the crewman found that the pain had not eased, and sought professional medical advice. He underwent an X-ray and a medical assessment, both of which confirmed that the injury was in fact minor. The crewman was able to continue working as normal and expected some bruising.

Our member drew the following conclusions regarding the cause of the incident:

- ◆ Simultaneous operations combined with a lack of situational awareness allowed the incident to occur:
 - The Master and crewman should have better organised themselves such that there was no need to work so close to the open hatchway
 - The crewman should have been paying more attention to his work surroundings, knowing that he was working close to an open hatchway.

Our member reiterated the importance of proper preparation. Before starting any maintenance activities, especially simultaneous operations, always hold a toolbox talk and briefly explain to everyone involved exactly what works are to be carried out, and what hazards will be created as a result. A work plan should be confirmed and agreed to avoid unnecessary

exposure to the new risks. If it is believed that there may be new or unknown risks – a risk assessment should be made before starting work.

Members may wish to refer to the following incidents (search word: *hatch*):

- ◆ **IMCA SF 08/08** – Incident 1 – *Fall through open hatch in walkway*
- ◆ **IMCA SF 04/09** – Incident 2 – *Hand injury caused when worker tripped over hazard.*

3 Non-Fatal Man Overboard Incident

A member has reported an incident in which a crewman fell overboard during mooring operations. The incident occurred whilst an Offshore Support Vessel (OSV) was casting off from a barge after completing a delivery of groceries. Whilst retrieving the forward mooring rope from the sea (which was stuck between the forward Yokohama fender and the barge at the time), the crewman assigned to this activity lost his balance and fell into the sea. He was recovered unharmed.



Person who fell overboard



Place from which he lost balance

Our members' investigation revealed the following:

- ◆ **Before the incident:**
 - A general tool box talk had been held on board the barge in the morning before the day's activities – however no task specific tool box talk on mooring and unmooring of vessels was held before the operation
 - The mooring task was not risk assessed and risk controls were not set up and implemented;
- ◆ **The man overboard was:**
 - Wearing full Personal Protective Equipment (PPE) including a life vest
 - Known to be competent at his job and medically fit
 - Known to have attended and participated in several Man Overboard (MOB) drills held on board the barge
 - In the wrong place (between the space under the railings) while pulling the mooring rope to free it from the fender. This led to his falling overboard when he lost his balance;
- ◆ **The mooring rope was:**
 - Trapped or entangled on the Yokohama fender which was positioned directly by the fairlead
 - Relatively old and fitted with a bowling eye
 - Subject to further tension owing to swell conditions.
- ◆ **The deck surface was not slippery at the time of incident;**
- ◆ **The MOB rescue:**
 - Nearby personnel raised alarm of MOB before throwing a life buoy with a line in the direction of the man overboard
 - The man overboard pulled himself alongside the vessel (no MOB alarm was sounded from the barge)
 - A small boat was immediately deployed for rescue and the man overboard was recovered after less than five minutes.
- ◆ **After the incident:**
 - There was no immediate examination of the man overboard by the barge medic, and a drug and alcohol test did not take place immediately after the incident

- Communication of the incident to the client was not timely.

Our members' recommendations included:

- ◆ Appropriate and full toolbox talks and risk assessment to be carried out before mooring operations;
- ◆ Improve levels of supervision for mooring operations;
- ◆ Adjust position of Yokohama fender to prevent tangling or entrapment of mooring lines;
- ◆ Review MOB drill;
- ◆ Review of mooring operations to include:
 - Mooring lines under tension should be handled with utmost care, to avoid any sudden surge of weight
 - Mooring line should be pulled away from obstructions and kept well clear before heaving in during mooring and unmooring operations
 - Vessel crew should agree before mooring line is released for pick up
 - Damaged and worn out mooring lines should never be used for mooring operations;
- ◆ Fabrication and installation of mid-rails to prevent recurrence of incident;
- ◆ Post incident drug and alcohol test kits should be provided on board the barge;
- ◆ Following incidents, established emergency response protocols should always be followed.

Members may wish to refer to the following incidents (search words: *MOB, overboard*):

- ◆ [IMCA SF 16/13](#) – Incident 2 – *Fatality: man overboard*
- ◆ [IMCA SF 02/15](#) – Incident 5 – *Near miss: man overboard*
- ◆ [IMCA SF 10/15](#) – Incident 5 – *Daughter craft man overboard incident.*