Look after your back during manual work

**Background**
Every year, seafarers are injured through incorrectly lifting, carrying and pulling loads. Back injuries are one of the most common types of injuries suffered by ships' crew and can have serious implications for both the seafarer and the shipowner. An injured seafarer may find that his ability to do his job is affected and that his lifestyle in general may have to change. Shipowners on the other hand may have to bear substantial costs when an injured seafarer is unable to perform his duties on board. Since most back injuries are preventable, primarily by the use of proper lifting techniques, the purpose of this circular is to remind shipowners and crew of the importance of adhering to the proper instructions for lifting and manual handling of loads - regardless of the type of work and the time schedule involved in each particular task.

**Gard's experience**
*Crew claims* in Gard are those claims originating from *illness, injury or death* amongst ships’ crew. A review of all such crew claims registered with Gard over the last 10 years shows that *crew injuries* make up quite a substantial part of all Gard’s P&I claims costs. Over this period, close to 10% of Gard’s total P&I claims costs were generated by crew injuries alone. Furthermore, *back injury* is by far the most expensive injury type, representing some 25% of all of Gard’s *crew injury claims* costs. A review of the *injury cases* registered as occurring in a specific location on board indicates that almost half of all back injuries occur during work on deck or in the engine room. It is not possible to conclude that the age of the crew members involved in back injury cases is a contributing factor.

In one of the cases handled by Gard, a seafarer complained of pain in his lower back, radiating to his lower extremities, after a work operation involving lifting of the gangway. As his symptoms persisted, a doctor on shore was consulted and the seafarer was medicated and repatriated to his home country for further evaluation and treatment. The seafarer’s disability grade was assessed to be high and, as the injury appeared to have incurred during his work on board, he was given a 100% disability compensation. The table below presents costs that potentially can be involved in any back injury case. There can also be additional costs not listed, e.g. related to possible voyage deviations and/or legal fees in case of disputes.

<table>
<thead>
<tr>
<th>Typical costs (USD) involved in a non-invasive back injury case</th>
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<tbody>
<tr>
<td>Repatriation</td>
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<tr>
<td>P&amp;I correspondent</td>
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<tr>
<td>Substitute</td>
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<tr>
<td>Medical expenses</td>
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<tr>
<td>Sick wages</td>
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<tr>
<td>Disability compensation</td>
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<td><strong>Total cost (USD):</strong></td>
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Worth noticing is that the cost of each element may vary dramatically between different geographical locations, e.g. medical expenses in the U.S. can easily amount to USD 200,000 in a single case and even higher if hospital intensive care is required as daily hospital rates in the U.S. can be of the order of USD 25,000. Early notification by Members is particularly important in cases involving medical costs in the U.S. as this will allow Gard to evaluate the case and make arrangements for proper medical case management services and vetting of medical bills.

**Back injuries - contributing factors**
Some of the most common contributing factors to acute back injury relate to bad body mechanics, in other words, how we lift, push, pull, or carry objects; poor physical condition; poor design of job or work station; heavy lifting and/or poor underfoot surfaces such as slippery floors. It can be particularly challenging to carry out manual work tasks in a safe manner on board ships. Ships can be quite hazardous working environments and harsh weather conditions and movements of the ship are factors that must be taken into account. Decks can also be extremely slippery when continuously washed by the sea. Another challenge related to ship operations is time. With time being a critical factor, crew may sometimes feel pressured to take short-cuts and use unsafe working practices to achieve the planned sailing schedule.
The operation of a ship naturally involves a lot of physical activity and lifting of heavy loads by crew members and the consequences may be a gradual development of a back disorder over time. Signs of a potentially serious injury are often ignored because the pain is perceived as “normal” and bearable. Therefore, while an acute back injury may appear to have been caused by a single well-defined incident, weakening of the musculoskeletal support mechanism through years of incorrect working activities is instead the real cause of the injury.

**Employer and worker duties**

Health and safety on board ships is regulated by the laws of each flag state and an important document in this respect is the ILO’s Maritime Labour Convention (MLC) which will enter into force in August 2013. Regulation 4.3 of the MLC deals with health and safety protection and accident prevention but does not specify details. Instead the MLC stipulates what should be addressed by the flag states' regulations. Various international and national standards define the acceptable levels of exposure to workplace hazards as well as how to develop and put into practice a ship’s occupational health policy.¹

It is important to emphasize that shipowners have a duty to put such regulations into practice but that each crew member has an obligation to comply with the specific standards and policies applicable on board their ship. Crew members must take reasonable care of their own health and safety and that of others on board that may be affected by their activities and must immediately report incidents and near-misses to the appropriate officer.

**Recommendations – prevention of back injuries**

Fortunately, most flag states and shipowners take pride in providing their seafarers with good working conditions. However, with the entry into force of the MLC in 2013, Gard’s Members and clients have a clear regulatory responsibility to ensure that the crew’s work environment on board ships promotes occupational health and safety. Most occupational accidents and back injuries occur whilst performing daily routine duties and preventive measures should therefore focus on workplace instructions for all important functions on board and not only for high risk tasks such as mooring or repair work in engine rooms. It is recommended to:

- **Regularly assess the risks** associated with each work task and improve procedures and equipment if necessary. Lifting and work equipment provided must be suitable for its intended use.
- **Plan jobs** to eliminate or minimise the need for work to be performed in awkward positions.
- **Customise training** for each work group. Include basic instructions in anatomy and focus on the risk factors associated with poor body positioning.
- **Draw attention to the correct methods of bending, lifting and carrying** at every opportunity such as during safety meetings and “toolbox talks”. Awareness posters and instructions along with graphic illustrations of manual handling techniques should be posted at important locations on board.²
- **Stress the importance of teamwork.** Work with a partner to share a load and obtain mechanical assistance for heavy and/or oversized loads when necessary.
- **Encourage early reporting of symptoms** such as neck or back pains. If individuals with reduced robustness can be detected, acute back injuries can be prevented before they can happen. Early reporting can often make the difference between a relatively short treatment and recovery period and long term permanent disability.
- **Promote exercise!** A well-toned body can take unexpected stresses or strains better than one suffering from lack of exercise.

Gard’s statistical data indicate that back injuries alone account for a significant amount of human suffering, loss of productivity, and economic burden on compensation systems in the maritime industry and clearly demonstrate that personnel health and safety is of utmost importance on board a ship. By providing a safe and secure working environment on board, including opportunities for training, shipowners can facilitate the possibility for each individual working on board to take care of their own and fellow crew’s personnel safety.

¹ Examples of standards are the ILO code of practice “Accident prevention on board ships at sea and in port” and the UK MCA’s “Code of Safe working Practices for Merchant Seamen (COSWP).”

² See sample illustrations included in an Annex to UK MCA’s COSWP Ch.19 “Manual Handling”.

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