



### INTRODUCTION

Back injuries represent a significant portion of injuries among maritime and offshore workers. An MPS search showed that back injuries represent more than 10% of all the injuries in the database. Back injuries usually involve long recovery times, high associated healthcare costs and often lead to chronic health problems. Poor lifting mechanics and/or prolonged sitting/standing are the main cause of back injuries, which cause pain and absence from work. Furthermore, impact injuries, like being hit by an object or falling down to the ground, can lead to serious back problems. However, some tasks that are performed in the offshore and shipping industries, inevitably lead to higher incidence of back injuries, and this is often related to the location on the vessel where these tasks are being performed.

### CAUSE OF BACK INJURIES

Certain tasks and events that are routinely performed on the vessel, lead to higher incidence of back injuries. As shown in Figure 1, back injuries most often occur during lifting (35%). However, falling from the same level (16%) and different level (7%) contribute to a significant amount of back injuries.

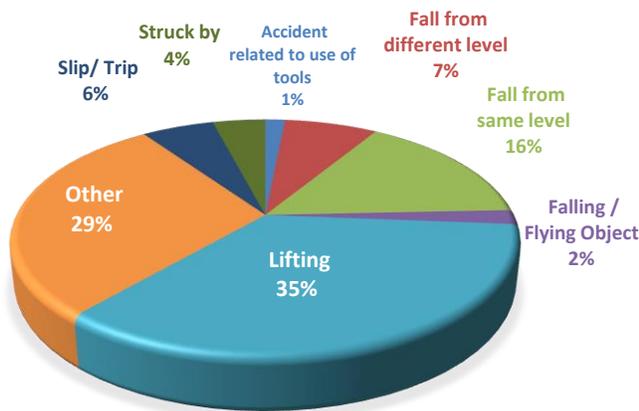


Figure 1. Back Injuries Depending on the Task/Event

### LOCATION ON THE VESSEL AND BACK INJURIES

Certain areas on the vessel lead to higher incidence of back injuries. As shown in Figure 2, the highest number of back injuries occur on the deck (45%), followed by injuries in the engine room (17%).

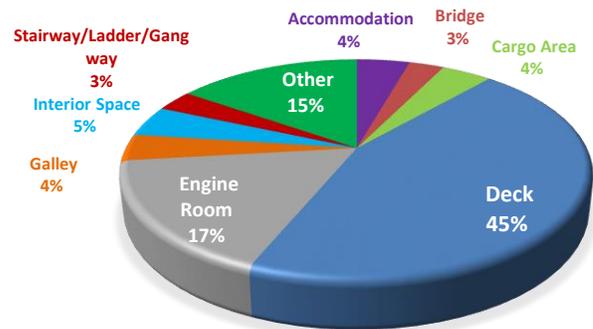


Figure 2. Back Injuries Depending on the Location

### TYPE OF BACK INJURIES

Depending on the mechanisms of the injury and the forces involved, different structures within the spine can get damaged. Most often, back injuries are due to muscle or ligament sprains that resolve within couple of days to weeks, however disk herniations or bone fractures can occur, which can lead to serious health problems.

### PREVENTION OF BACK INJURIES

There are number of strategies that can be employed to mitigate the incidence of back injuries. These include:

- Education on the proper lifting technique
- Proper exercise to strengthen back muscles
- Nutrition and weight control
- Removing or properly marking the slippery surfaces to avoid slips/trips/falls that can lead to back injuries.

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