



# FATIGUE OF TUGBOAT CAPTAINS DISASTER WAITING TO HAPPEN

**A comprehensive independent report finds that a major incident on the Panama Canal could be imminent due to serious health and safety concerns related to the fatigue of tugboat captains.**

## THE STUDY

The International Transport Workers' Federation on behalf of the union representing Panama Canal tugboat captains - the Union de Capitanes y Oficiales de Cubierta (UCOC) - commissioned experts in human error, accident causation and occupational medicine to provide an independent assessment of fatigue among Panama Canal tugboat captains.

The study investigates the relationship between captains' fatigue and the operational safety of the Panama Canal, and the relationship between fatigue and the captains' physical and mental health. Fifty-five captains, over a third of active captains in the Panama Canal, were interviewed.

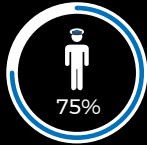
## KEY REPORT FINDINGS

- Panama Canal captains' work schedules are fatigue inducing.
- Captains are being required to work excessive shifts, 12 to 20+ hours, with minimum or no breaks and insufficient rest periods.
- Excessive shifts and insufficient rest is disrupting captains' circadian sleep cycles.
- Majority of the captains interviewed reported work-induced fatigue.
- Captains' work schedules have adverse effects on their health, exacerbating pre-existing conditions.



**100% of captains said PCA did not have written rules governing hours of service or hours of rest.**

PANAMA CANAL



75% of captains indicated they have difficulty sleeping on their current schedule



45% of captains have worked excessive 16-20+ hour shifts in the last 60 days

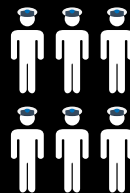


Over 50% of captains said PCA management cause them stress or they fear intimidation



Over 50% of captains said they were unable to eat or use the toilet for the duration of their transit in the new locks

**6 captains admitted briefly falling asleep while operating tugs**



**6 captains were involved in motor vehicle accidents driving to or from work**

## FATIGUE INCREASING RISK

Captains' duties involve extended periods of concentration, judgement, situation awareness, and decision making, and because these cognitive activities degrade with fatigue, the captains' work schedules pose a risk to their performance, and therefore to the safety of Panama Canal operations.

The Panama Canal Authority's (PCA) failure to address previous incidents resulting from work-induced fatigue – such as a tugboat collision in the Canal in 2017 – as well as its lack of cooperation with international authorities in the investigation of that accident, and its lack of adherence to agreements governing mariner hours of service and oversight of tugboat captains' health, manifest a safety culture that increases rather than reduces the risk of accidents.

## KEY REPORT RECOMMENDATIONS

- Calls on the PCA to establish an independent entity to oversee the safety of Panama Canal operations to investigate all occupational accidents, occupational diseases, and maritime accidents, following IMO protocols and best medical practices.
- Compels the PCA to implement a fatigue risk management system to ensure operational safety and reduce exposure to work-induced adverse health effects.
- Recommends that the PCA to involve tugboat captains in decisions concerning tasks that fall within their area of responsibility, their working conditions and solutions to work-related issues.
- Advises the PCA to restore the second captain during transits through the new locks.

**“THE EVIDENCE OF REPEATED DEMONSTRATIONS BY PCA OR WHAT CAN ONLY BE CHARACTERISED AS A DISREGARD FOR THE SAFETY OF CANAL OPERATIONS ILLUSTRATES A PCA SAFETY CULTURE THAT IS COUNTER TO WHAT SHOULD BE EXPECTED FROM ORGANISATION THAT PLAYS SUCH A CRITICAL ROLE IN ITS COUNTRY'S IDENTITY, ECONOMY, AND CITIZEN HEALTH AND WELFARE.”**

