



# Safety focus 2020

With the new year beginning, SAS talks to industry figures and investigates what they believe should be the top three issues on shipping's safety agenda in 2020 and what can be done to mitigate the risks

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Seafarers endured a wide breadth of safety incidents in 2019. Many were enduring risks, such as collisions, groundings, and shipboard fires. Others were facing newer or evolving threats, for example, targeted cyber attacks to vessels and crews becoming embroiled in the fallout of US-imposed sanctions on Iran. The question is, which issues should the shipping industry prepare for this year. Will it be more of the same or are there other areas that we should turn our attention to?

## The common denominator

The main safety issue that was brought up, by all industry figures interviewed by SAS, was the implementation of the International Maritime Organization's (IMO's) 2020 sulphur cap. Concerns that arose, associated with this legislation, included the emergence of new alternative fuels on the market. These new fuel types have yet to be adequately tested. Jihyeon Gina Kim, liaison assistant, and Berlan Branko, accredited representative at the International Transport Workers' Federation (ITF), underlined this concern, citing the risk of explosions owing to the use of ammonia and the major differences between laboratory and engine room environments when it comes to testing fuel oil safety. Hence the need for further rigorous testing of these unproven alternative fuels and blends so as to not put the safety of crew at risk.

Fuel oil quality was also brought to the attention of SAS regarding the implementation of the IMO 2020 legislation, by Jonathan Spremulli, principal director marine at the International Chamber of Shipping. "It is important that all shipping companies [or] managers have appropriate procedures in place in advance of the 2020 implementation date and to ensure that seafarers understand any changes they need to make to the way they handle fuel on board, new safety hazards, and

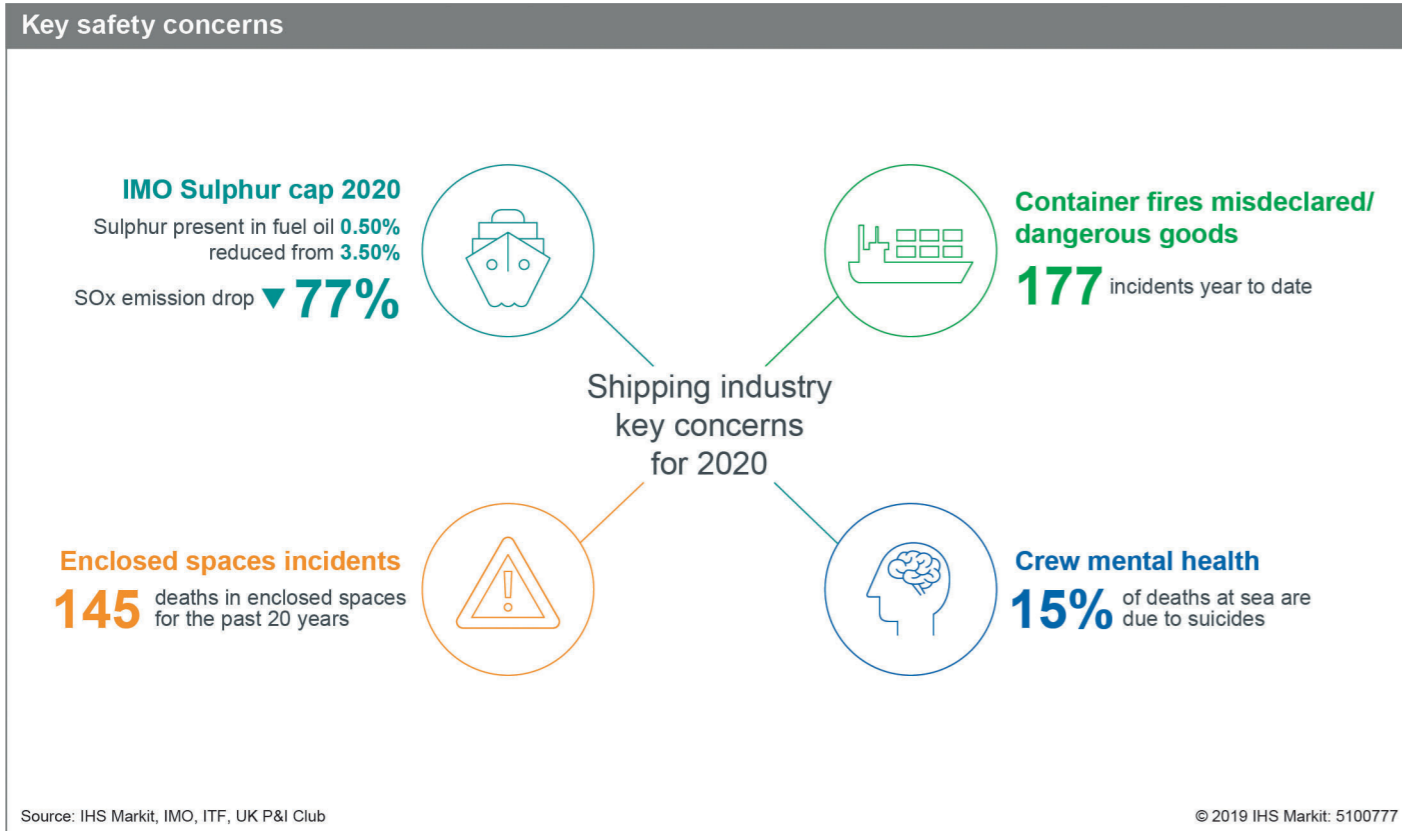
actions they need to take," Spremulli warned.

Alvin Foster, deputy director of loss prevention at North P&I Club agreed, highlighting the uptake of very-low sulphur fuel oil (VLSFO) products, as a replacement to the traditional heavy fuel oil (HFO) to comply with IMO 2020, as a new risk seafarers should be aware of. "Much uncertainty remains on VLSFO products. The characteristics are expected to vary significantly from product to product. One stem could have a viscosity of 200 cSt [centi-Stoke], whereas the next could be 20 cSt. Pour points could be vastly different."

Foster went on to advise crew on how to mitigate the risks, "Good onboard fuel management will be essential. This is in addition to the widely expressed concerns on stability of these fuels and compatibility between them, where the end result could be blocked fuel systems and engine damage. Extensive fuel tank cleaning prior to receiving new fuels might be needed."

The adequate training of crew to prepare for the implementation and to handle these new low-sulphur fuels, which can be far more volatile than the traditional HFO, was also brought forward by Martin White, CEO Stream Marine Training, a marine training and consultancy provider. Stating that ferries, for example, are now carrying vehicles of several fuel types including petrol, diesel, and liquid natural gas (LNG) for heavy goods vehicles and hydrogen fuel cells. "The close proximity of multiple and potentially hazardous fuel sources in a concentrated area that would need different treatment in an emergency and, as they are not a cargo as such, would not be liable to the current safety regulations."

Ferries are also being fuelled by several different hybrid technologies and White maintains that new methods of training for crew, especially on the new environmental legislation, need to be applied in law and best practice so that these initiatives can be delivered safely.



The second-most prevalent safety concern for 2020, as put forward by shipping industry figures, was ship fires and their causes. There has been a drastic increase in ship fires in 2019, so much so that a specific category was created for a firefighting safety product at the annual Safety at Sea Awards in September of that year.

Yves Vandeborn, director of loss prevention at Standard Club, fears that unless a solution is found for the causes of these fires, the upwards trend will continue. The main sources of this problem are dangerous and misdeclared goods, as can be seen with the fire and subsequent explosion on board the *KMTC HONGKONG*, injuring 211 people in Thailand. The consequences of these events are almost always devastating. Unfortunately, in the case of misdeclared goods, Vandeborn said, “There is little that seafarers can do to prevent a fire from a misdeclared container cargo or a faulty battery on a hybrid car on board a car carrier. Solutions for this problem lies ashore in the booking offices of container liners where misdeclared container cargoes need to be identified before they get loaded on board ships.”

Spremluli concurred that the misdeclaration of cargo is regrettably not a safety risk crew can mitigate, despite being the ones most affected by the consequences; once on board, there is little the crew can do to prepare aside from firefighting training. Spremluli also maintained that this is a shore issue and “is something that requires better

inspection prior to shipment, which requires member states to have in place appropriate compliance regimes for the International Maritime Dangerous Goods Code”.

Foster outlined that this is an issue that not just affects the container ship sector, but car carriers and bulk cargos too, especially if cargos are “routinely declared inaccurately, leading to crews unable to properly appreciate whether a cargo is liable to liquefy or presents a fire or explosion risk”.

However, Foster ended on a positive note regarding the safety issue as this affects the shipping industry as a whole. He added, “We can take encouragement from how many of the big players are coming together to tackle this.”

If the industry can organise themselves to develop a common strategy to challenge this safety concern, through more stringent inspection requirements, there may well be less deadly incidents in the coming year.

#### Enclosed space

Incidents that occur in enclosed spaces remains a tragic thorn in the side of the shipping industry and will remain so, as Kim and Branko uphold. Foster agreed, “It is becoming apparent that past efforts to combat this problem have had limited effectiveness. More procedures, regulations, or even more training is not going to fix this.” He maintains that there needs to be a better understanding as to the external factors and behaviour

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Yves Vandeborn, director of loss prevention at Standard Club

driving seafarers to make these dangerous decisions, for there is no simple solution to this complex issue.

White, on the other hand, gave an interesting evaluation of these kinds of situations: that seafarers are de-risking hazardous activities on board vessels, more so than other high-risk industries such as mining, construction, and oil and gas. “The reason for this is if you are living and working at sea on board a ship, you build a false sense of confidence in safety critical tasks that you carry out – as very often the workplace and feeling of being ‘at home’ become inseparable in a seafarers’ mind such that hazardous areas and activities become familiar and personnel do not appreciate the dangers that they pose. This therefore, ‘de-risks’ some activities, which then puts personnel in danger,” he said.

Further investigation into the mitigating factors and behaviours on board, as highlighted by Foster and White, needs to be carried out to better tackle this issue as an industry and to avoid more tragic deaths in 2020.

#### Shared concern

Although not part of their top three safety concerns, a few respondents cited seafarer wellbeing, more specifically mental health awareness, that needs to be on

Ship fires and its causes is made the second-most prevalent safety concern 2020



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the safety radar for 2020. Vandeborn highlighted this issue, more precisely the lack of awareness, especially among seafarers of the warning signs of depression and wellbeing programmes available to them. “More effort can be made to increase socialisation or social activities to help crew to bond on board.”

Global maritime charity Stella Maris, previously Apostleship of the Sea, agreed that the focus on mental health awareness should remain throughout 2020, emphasising that the main danger is “loneliness on board with seafarers shutting themselves away on board the vessel even when at sea”. Stella Maris advised that ship companies and managers should lead by example. One company the charity works with introduced games on board and game time for seafarers, as well as meetings after lunch or dinner time for crew to relax. “[This is] just a time for human communication and games such as dominos, monopoly, and bingo. This is since they [the company] had a death on board and the safety management team went around all the vessels and did a push on this,” said the seafarer charity.

Kim and Branko concur that mental health awareness needs to be among the top safety concerns for 2020, as it was in 2019. This being due to “disruptive technology such as multiple alarms, isolation, and relatively small crew size compared with the size of ships, working and living conditions, short shore leaves, and the not following the actual hours of rest and hours of work”.

Stella Maris also stressed the importance of adhering to the correct amount of hours of rest, as it definitely affects the mental state of crew and it is a lot harder to carry out the work they need to do safely in a tired state.

The key advice for crew, provided by Kim and Branko, which is applicable to all of their safety concerns, but others mentioned here is “to go back home safe, we need to have ownership”.

Furthermore, both expanded the theme of ownership and counsel crew to “update yourselves with regulations and policies, find the ways for seafarers to address problems and have a say. Be serious with safety trainings”.

The ITF imply that a part of the responsibility for the betterment of seafarer conditions is on the education of the seafarers for themselves. This ownership of the situation in which they find themselves introduces the theme of empowerment. To this aim, the ITF recommend establishing an appropriate mentoring system to be placed on board. This way, education can be peer-led, as well as ensuring the mental wellbeing of crew as they can be continuously checked upon and signs of depression can be identified earlier.

This recommendation would address Vandeborn’s concerns surrounding crew awareness, in addition to hampering the feeling of isolation on board. It has been made clear that crew wellbeing and seafarer rights are rising as a key concern. We can hope that in this new year charities, companies, and clubs will band together to ensure shipping is a safer and fairer place to work. 📌