

ADDITIONAL ACTION NEEDED TO ADDRESS MARINE FIREFIGHTING CHALLENGES

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A report to congressional committees

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What GAO Found

Fires on vessels are among the most dangerous and challenging incidents to which firefighters can respond. Vessels may also carry hazardous cargo, like lithium-ion batteries, further complicating marine firefighting responses. According to U.S. Coast Guard data, there were 886 nearshore marine fires that occurred between 2015 and 2025. About one quarter (206) of these resulted in either death, injury, over \$200,000 in damage, or a total loss of the vessel.

The U.S. Coast Guard is the principal federal agency responsible for overseeing marine safety. For marine firefighting, the Coast Guard plays a coordinating role while land-based fire departments extinguish fires. Following a marine fire that resulted in two firefighter deaths in 2023, the Coast Guard established a task force to address various marine firefighting challenges. The task force has taken several steps to address them but gaps remain.

Examples of Firefighting Challenges, Coast Guard Actions, and Gaps

Challenge	Coast Guard actions	Remaining gaps
 Limited critical coordination among stakeholders	Developing guidance for sectors to standardize marine firefighting plans	Inconsistent local personnel to coordinate stakeholders before incidents; such coordination helps ensure a safe and effective response
 Limited training for firefighters	Developed training videos for firefighters and developing a course for local Coast Guard officials	Obtaining vessel tours and shipboard exercises for land-based firefighters is challenging
 Limited information sharing across sectors	Shared marine firefighting information through regional mechanisms	No mechanisms to store and share information, such as best practices, across sectors
 Delayed and limited vessel response plans	Developing guidance to help local Coast Guard officials compel vessels to activate vessels response plans (pre-approved plans to dispatch resources); developed a tool to quickly collect marine fire incident information	Guidance is unclear what events should trigger vessel response plan activation Legal limitations prevent the Coast Guard from requiring certain vessels that use alternative fuels to have vessel response plans

Source: GAO analysis of U.S. Coast Guard documents and interviews with U.S. Coast Guard officials and maritime stakeholders; Icons-Studio/stock.adobe.com. | GAO-26-108533

Designating consistent Coast Guard field personnel to lead coordination before marine fires occur, facilitating more hands-on training for firefighters on vessels, and establishing an information sharing mechanism would help ensure firefighters have the knowledge and skills necessary to safely and effectively extinguish vessel fires. Further, developing guidance on what warrants vessel response plan activation would help ensure resources are quickly mobilized and better ensure the safety of firefighters.

The number of vessels that use alternative fuels continues to grow. However, legal limitations prevent the Coast Guard from requiring nontank vessels that use alternative fuels—such as ferries powered by lithium-ion batteries—to have vessel response plans related to hazardous substance discharges. These limitations predate the widespread use of alternative fuels. Having that authority would empower the Coast Guard to better ensure vessels and firefighters can quickly receive assistance in the event of a fire.

Why GAO Did This Study

The Coast Guard has issued regulations requiring certain vessels to have response plans that identify the resources that would respond to marine fires related to oil discharges.

The National Defense Authorization Act for Fiscal Year 2026 includes a provision for GAO to review, among other things, the Coast Guard's efforts related to marine firefighting. This report examines (1) how frequently nearshore marine fires occur and the characteristics of those fires and (2) what challenges exist in marine firefighting and how the Coast Guard is addressing them.

GAO analyzed Coast Guard data for 2015 through 2025; reviewed Coast Guard guidance and investigative reports; and interviewed Coast Guard officials, fire chiefs based in seven Coast Guard sectors, and representatives from maritime and firefighting stakeholder associations.

What GAO Recommends

Congress should consider amending existing law to ensure that owners and operators of nontank vessels that use alternative fuels prepare vessel response plans related to hazardous substance discharges.

GAO is also making five recommendations to the Coast Guard, including to designate marine firefighting coordination responsibilities to specific field positions, engage with fire departments to coordinate training, establish a mechanism to store and share marine firefighting information, and develop factors maritime stakeholders and the Coast Guard should consider regarding vessel response plan activation. The Coast Guard agreed with all five recommendations.