



U.S. Coast Guard - American Waterways Operators Annual Safety Report

August 11, 2026

Established Safety Metrics

For over 30 years, the National Committee of the Coast Guard-AWO Quality Partnership has used three measures to track overall trends in safety and environmental protection. While not all-encompassing, the measures are considered useful indicators of towing industry trends. The measures are:

- Crewmember fatalities per 100,000 towing industry workers.
- Gallons of oil spilled from tank barges per million gallons transported.
- The number and severity of towing vessel casualties.

This report also contains other freight carrying towing industry data and measures for the years 1994 to 2025.

Crewmember Fatalities

Four crewmember deaths involving freight carrying towing vessels and barges were reported to the Coast Guard in 2025. A review of these casualties revealed that one of the four reported deaths was directly related to towing vessel operations. The following is a summary of the operational crewmember fatality:

- While re-positioning a barge, a deckhand fell off the bow of the barge into the water. The deckhand was swept under the barge and drowned. Post-mortem toxicology identified methamphetamine and tetrahydrocannabinol, which may have contributed to the mariner's fall overboard and subsequent drowning.

The following is a summary of the three crewmember fatalities reported to the Coast Guard that were not directly related to towing vessel or barge operations:

- While the towing vessel was underway, a crewmember was found deceased in his stateroom. The death was attributed to natural causes and pre-existing medical conditions. (Activity ID 8095675)¹
- While the towing vessel was underway, a crewmember was found unconscious in the berthing area head/restroom. The death was determined to be caused by fentanyl toxicity. (Activity ID 8284171)
- While underway, the towing vessel diverted after a crewmember became severely ill and required immediate medical attention. The crewmember subsequently stopped breathing and the death was determined to be caused by fentanyl toxicity. (Activity ID 8225163)

In addition to the above, the following incidents involved non-freight carrying towing vessels or barges and resulted in non-crewmember fatalities, which are provided for information:

- A collision occurred between a recreational sailboat and a construction barge being pushed by an uninspected towing vessel. The collision resulted in the death of three passengers aboard the sailboat.
- A crane mounted on a construction barge collapsed during a pipeline dismantling operation at a fuel facility, and two shoreside construction workers were fatally injured. The Occupation Safety and Health Administration led the subsequent investigation. (Activity ID 8266659)

The following charts and tables in this section relate to the operational crewmember fatalities only.

¹ To help readers locate records in the USCG Marine Information Exchange, Activity IDs for closed investigation are provided; see the instructions at the end of this report.

Chart 1 displays the crewmember fatalities per year and the 5-year moving average from 1994 to 2025.

Chart 1 – Crewmember Fatalities, 1994 to 2025

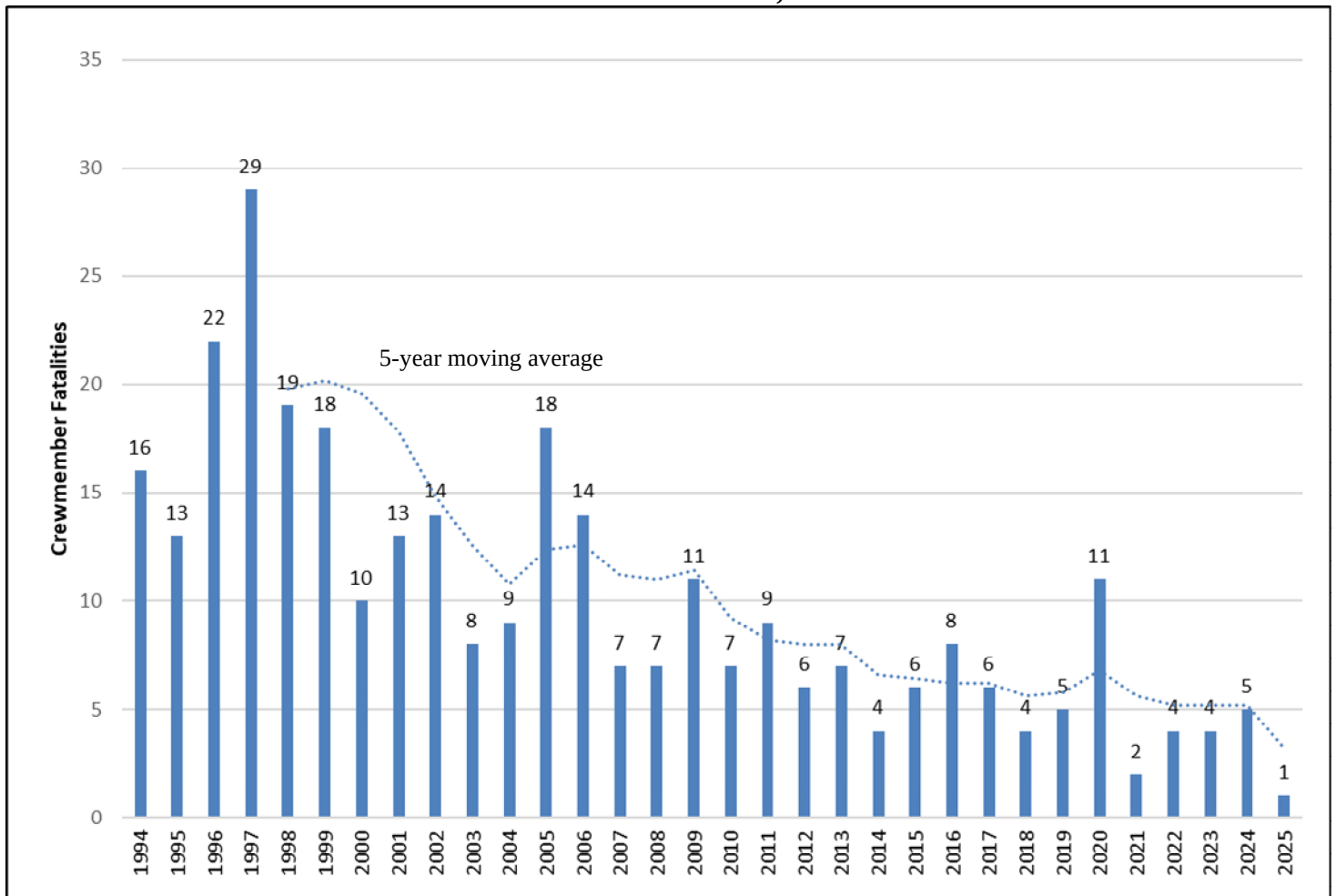


Chart 2 displays the cumulative total of crewmember fatalities by accident type from 2000 to 2025. During this period, the largest number of fatalities were attributed to “Contact Injury – Fall into Water”.

Chart 2 – Crewmember Fatalities by Accident Type, 2000 to 2025

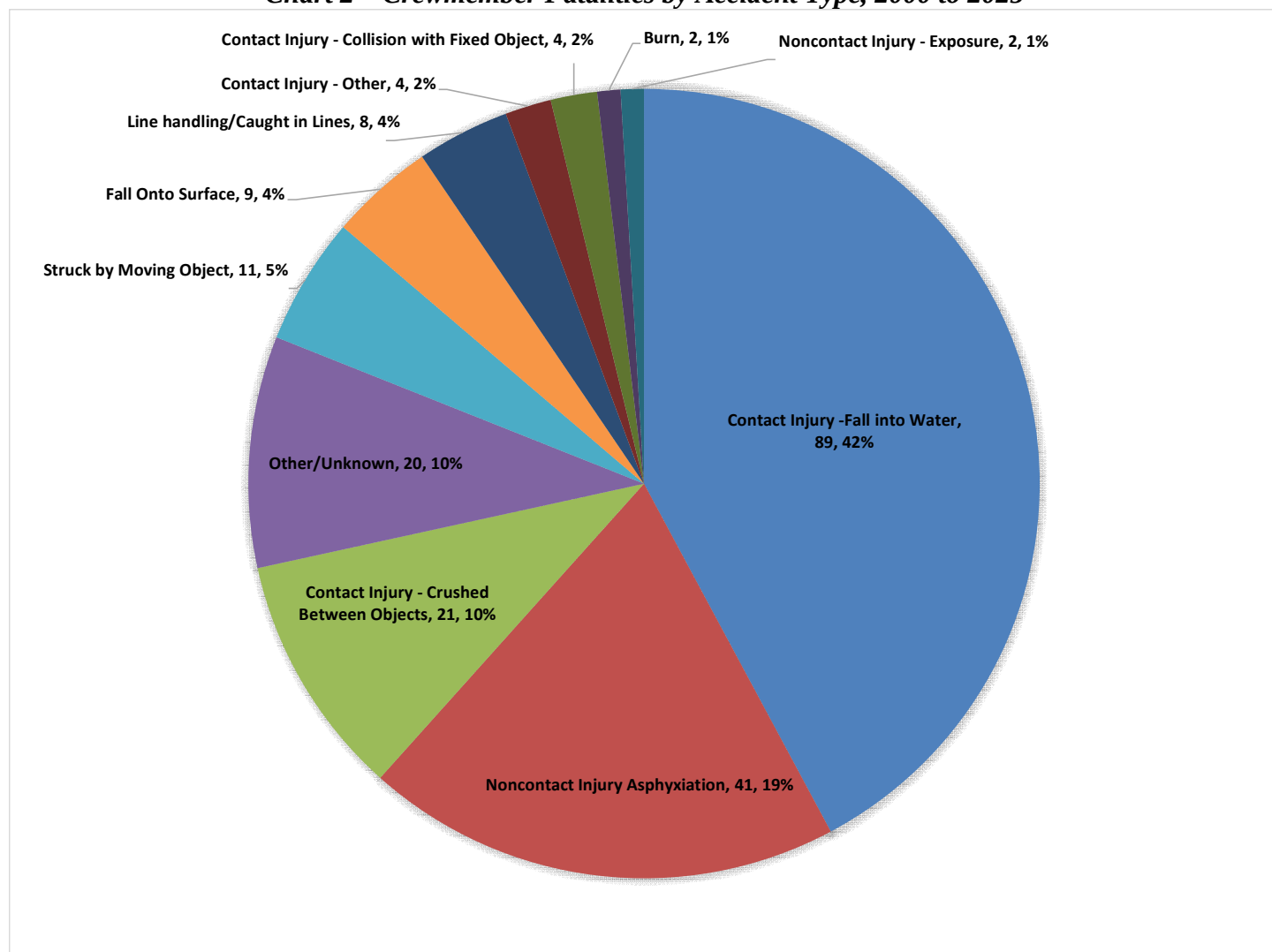


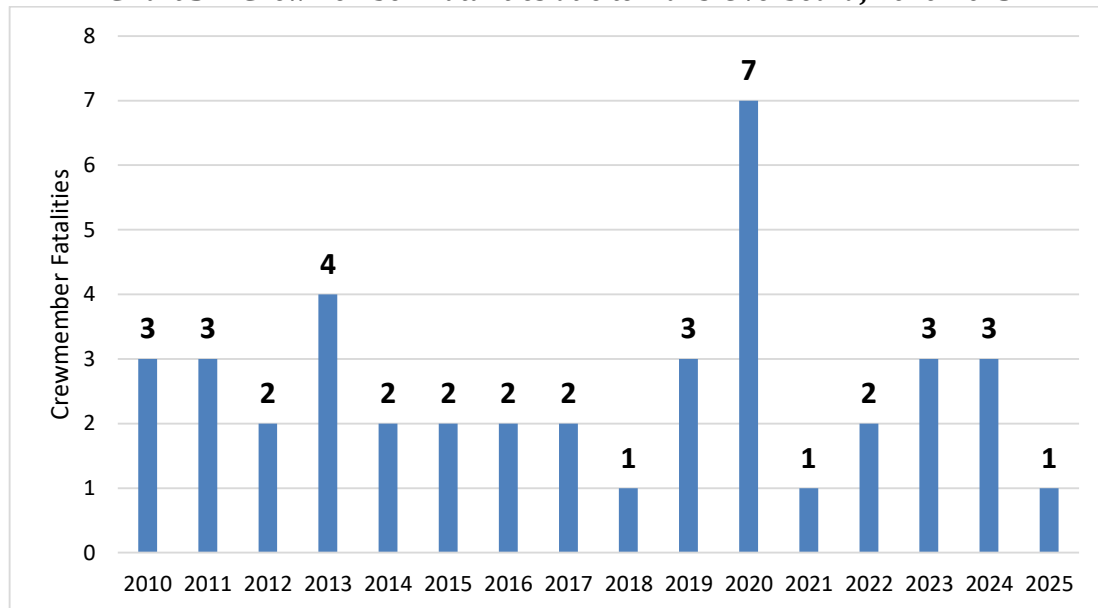
Table 1 compares crewmember fatalities by accident type each year from 2021 to 2025 to the cumulative total of crewmember fatalities by accident type from 2000 to 2025.

**Table 1 – Crewmember Fatalities by Accident Type
Last Five Years (2021-2025) versus Cumulative Totals (2000-2025)**

Accident Type	2021	2022	2023	2024	2025	2021 to 2025		2000 to 2025	
						Counts	%	Counts	%
Contact Injury - Fall into Water	0	0	2	1	0	3	11.5%	89	42.4%
Noncontact Injury Asphyxiation	0	0	1	1	1	3	11.5%	40	19.0%
Contact Injury - Crushed Between Objects	1	2	0	0	0	3	11.5%	21	10.0%
Other/Unknown	1	0	1	2	0	4	15.4%	20	9.5%
Struck by Moving Object	0	0	0	0	0	0	0.0%	11	5.2%
Fall Onto Surface	0	0	0	1	0	1	3.8%	9	4.3%
Line handling/Caught in Lines	0	0	0	0	0	0	0.0%	8	3.8%
Contact Injury - Other	0	0	0	0	0	0	0.0%	4	1.9%
Contact Injury - Collision with Fixed Object	0	1	0	0	0	1	3.8%	4	1.9%
Burn	0	0	0	0	0	0	0.0%	2	1.0%
Noncontact Injury - Exposure	0	1	0	0	0	1	3.8%	2	1.0%
TOTAL	2	4	4	5	1	16	61.5%	210	100.0%

Chart 3 displays the number of crewmember fatalities resulting from falls overboard from 2010 to 2025. The data in Chart 3 is based on a manual review of the casualty investigations and accounts for all fatalities where the crewmember entered the water, regardless of the “accident type” selected by the marine investigator. As such, Chart 3 may differ from the data captured in Chart 2 and Table 1.

Chart 3 – Crewmember Fatalities due to Falls Overboard, 2010-2025

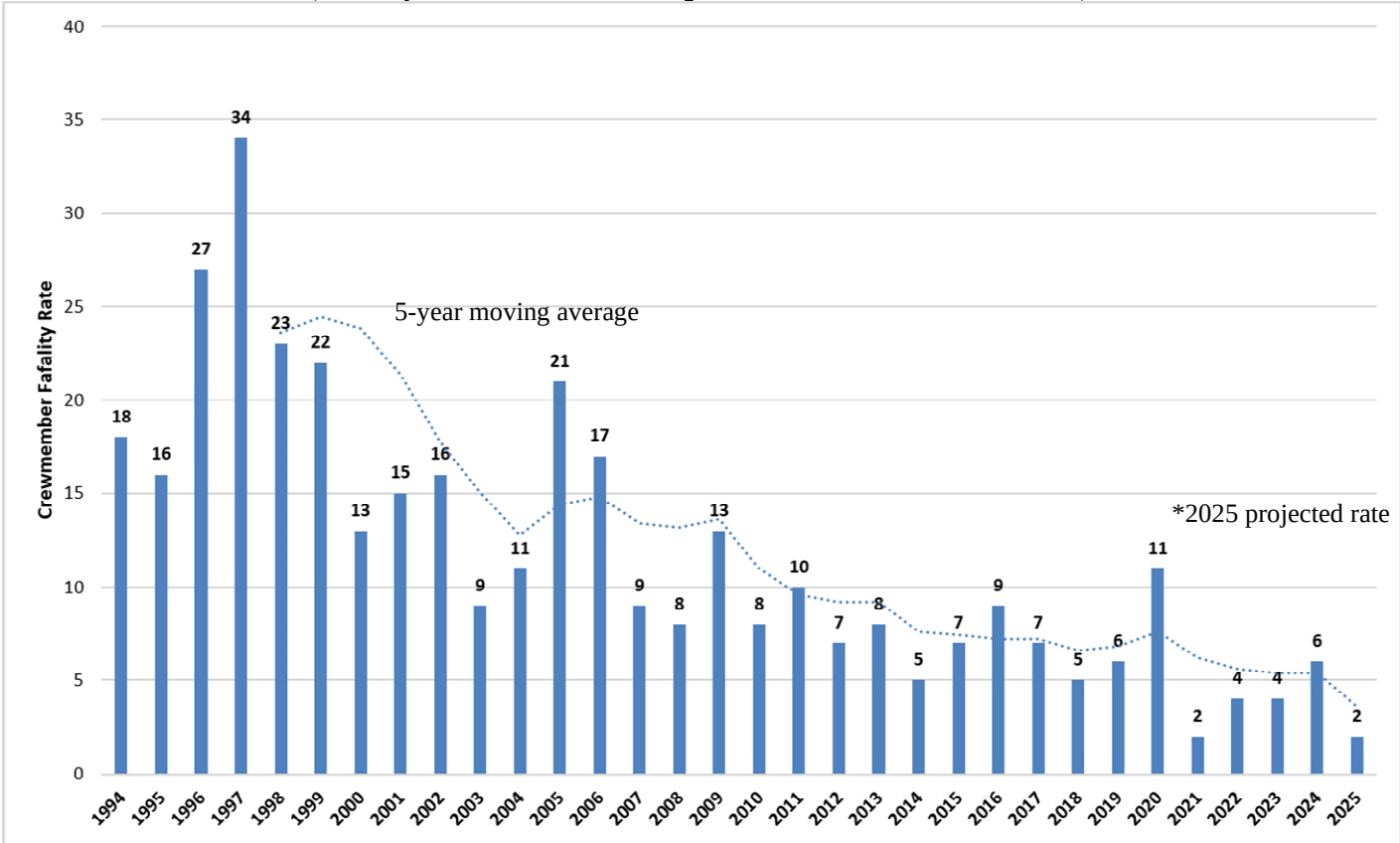


Crewmember Fatality Rate

The towing industry crewmember fatality rate for 2024 was 5.4 fatalities per 100,000 Full-Time Employees (FTE). The projected crewmember fatality rate for 2025 is 1.1. Chart 4 displays the crewmember fatality rate from 1994 to 2025 with rates rounded up to the nearest whole number.

The crewmember fatality rate is calculated using the “Mercer Model,” which was developed through AWO-funded research. This model uses Army Corps of Engineers vessel and transit data to calculate the number of FTE in the towing vessel industry. The crewmember fatality rate enables comparison against other worker fatality rates produced by the Bureau of Labor Statistics (BLS), which are also expressed by the number of fatalities per 100,000 FTE.

Chart 4 – Crewmember Fatality Rate per 100,000 FTE² per Year
(Fatality rates are rounded up to the nearest whole number)



² One FTE or Full Time Employee is the equivalent of one person working a 40-hour work week for 50 weeks of the year.

For comparison, Table 2 provides the worker fatality rates as calculated by the BLS for all workers and for transportation sector workers from 2020 to 2024³ along with the Towing Industry Crewmember Fatality Rate.

**Table 2 – Comparison of Worker Fatality Rates
(Fatalities per 100,000 FTE)**

Data Source	2020	2021	2022	2023	2024
Bureau of Labor Statistics (BLS), All Fatal Work Injuries	3.4	3.6	3.7	3.5	3.3
BLS, Transportation and Material Moving Fatal Work Injuries	13.4	14.5	14.1	13.6	12.5
Towing Industry Crewmember Fatality Rate	10.6	1.9	3.3	3.3	5.4

Table 3 provides the BLS worker fatality counts and rates for all industry sectors for 2024.

Table 3 – Number and Rate of Fatal Work Injuries for 2024 by Industry Sector

Industry	Number of fatal work injuries	Fatal work injury rate (per 100,000 full-time equivalent workers)
Construction	1,034	9.2
Transportation and warehousing	865	12.2
Agriculture, forestry, fishing, and hunting	475	20.9
Manufacturing	353	2.4
Leisure and hospitality	273	2.4
Retail trade	258	1.8
Other services (exc. Public admin.)	236	3.3
Educational and health services	160	0.7
Wholesale trade	145	4.6
Mining, quarrying, and oil and gas extraction	92	13.8

Key findings from the BLS Census of Fatal Occupational Injuries Summary for 2024:

- The overall fatal injury rate of 3.3 fatalities per 100,000 FTE workers decreased for the second year in a row.
- The decrease in fatal injuries in 2024 was largely driven by a 16.2 percent drop in fatalities due to exposure to harmful substances or environments (to 687 cases from 820). This decrease was in turn driven by a decline in drug or alcohol overdoses, which accounted for 59.7 percent of fatalities in this category, dropping to 410 fatal injuries in 2024 from 512 fatalities in 2023.
- Workers in transportation and material moving occupations represented the occupational group with the most fatalities with 1,391 fatal work injuries in 2024, though this was a 7.0-percent decrease from 2023 (1,495). The fatality rate for these workers was 12.5 fatalities per 100,000 FTE workers in 2024, down from 13.6 in 2023.

³ Census of Fatal Occupational Injuries – Current, <https://www.bls.gov/news.release/cfoi.nr0.htm>

Oil Spill Volumes

Approximately 1,373 gallons of oil was spilled into U.S. navigable waterways as a result of 104 operational tank barge pollution incidents in 2025. Chart 5 displays the total gallon quantity of oil spilled from tank barges annually from 1994 to 2025.

Chart 5 – Gallons (in thousands) of Oil Spilled from Tank Barges per Year, 1994 to 2025

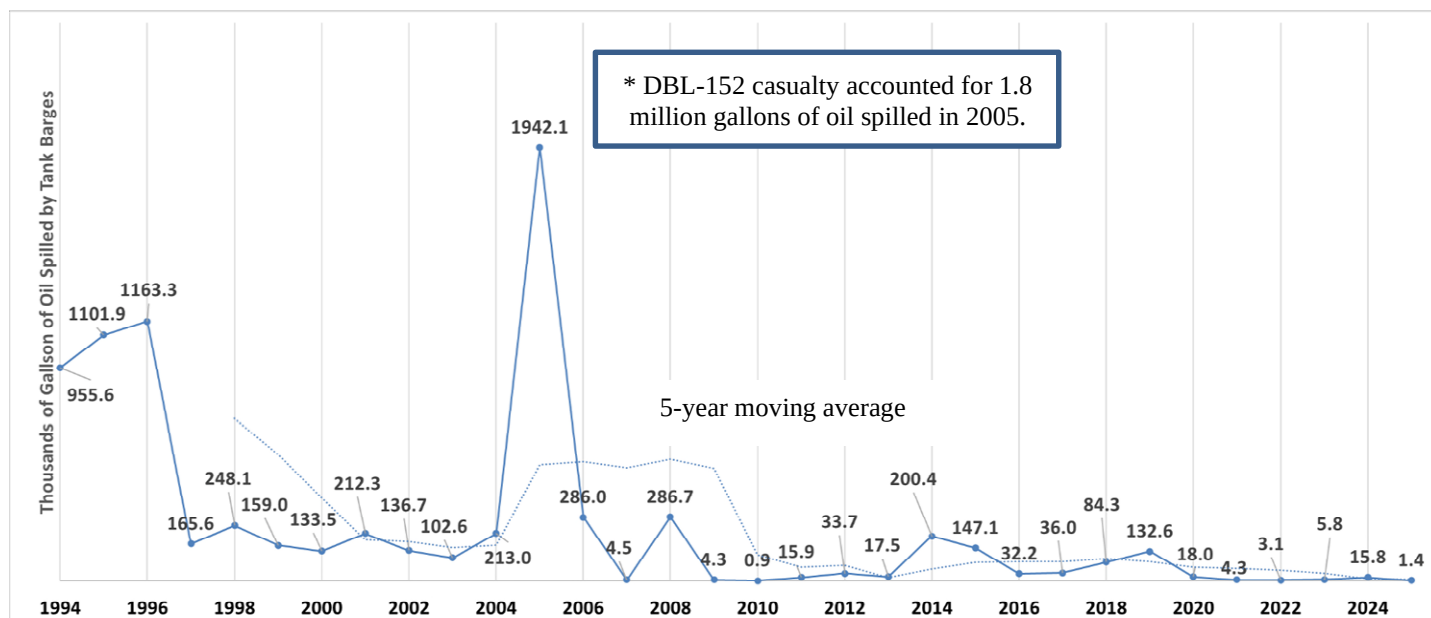


Table 4 provides the number of tank barge oil spills and the total volume of oil discharged into the water by oil spill discharge category. In 2025, the 4 largest oil spills accounted for 54.8% of the total volume of oil spilled from tank barges.

Table 4 – Tank Barge Oil Spills by Spill Size Category for 2025

Discharge Category (in gallons)	Count of Discharge Category	Sum of Discharge Amounts into Water (gallons)
less than 1	13	2
1 to 10	65	134
10 to 100	22	486
100 to 1000	4	752
more than 1000	0	0
Total	104	1,374

The following is a summary of the four largest barge oil spills:

- A barge discharged oil into the waterway from one of its tanks for unknown reasons.
- Hydraulic fluid entered the waterway after broken excavation equipment aboard a barge leaked during maintenance.
- Diesel was discharged into the waterway when a barge partially sank for unknown reasons.
- Diesel was discharged into an industrial canal following a discharge event; investigation is pending.

Table 5 provides the number of towing vessel oil spills and total volume of oil discharged into the water by oil spill discharge category. The two largest oil spills account for 74.7 % of the total volume spilled from towing vessels in 2025.

Table 5 – Towing Vessel Oil Spills by Spill Size Category for 2025

Discharge Category (in gallons)	Count of Discharge Category	Sum of Discharge Amounts into Water (gallons)
less than 1	17	5
1 to 10	79	167
10 to 100	33	864
100 to 1000	7	1,314
more than 1000	2	6,950
Total	138	9,300

The following is a summary of the two largest towing vessel oil spills:

- Diesel was discharged into the river due to improper fuel transfer procedures, including failure to perform required tank soundings.
- Diesel was released after a towing vessel struck an unmarked underwater obstruction, causing hull damage and partial sinking. (Activity ID 8239218)

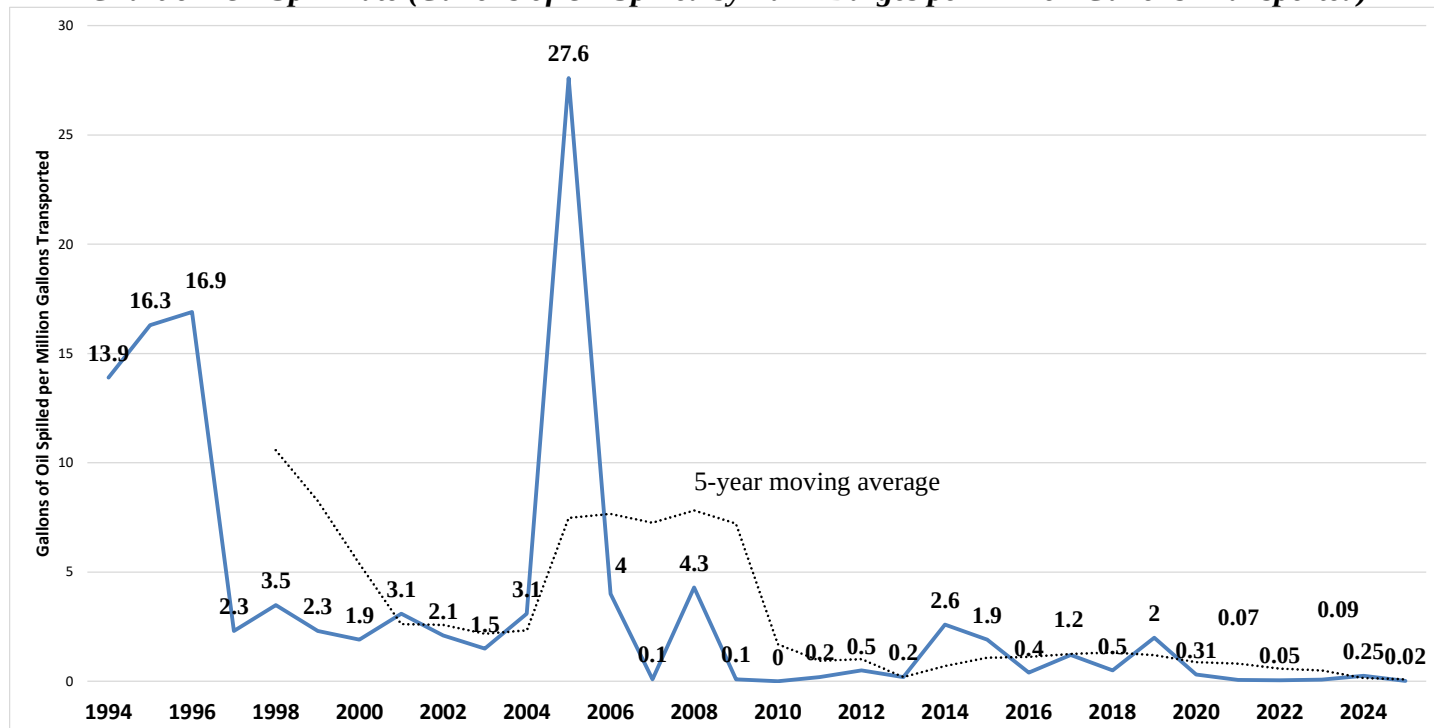
A review of the casualty data also identified two chemical discharges involving tank barges. The following is a summary of these incidents:

- Approximately 566 barrels of ethanol was released into the river after a barge struck a bridge, causing the tow to break apart and rupture a cargo tank. (Activity ID 8152579)
- Approximately 185 barrels of benzene was released into the river when two barges collided, creating a hull breach and resulting in product loss.

Oil Spill Rate

The tank barge oil spill rate is calculated using data from both the Coast Guard and the Army Corps of Engineers. Based on 2023 data, the projected oil spill rate for 2024 was 0.27 gallons of oil spilled for every million gallons of oil transported, and the projected oil spill rate for 2025 is 0.02. Chart 7 shows the oil spill rates for the years 1994 to 2025. {The Army Corps of Engineers Waterborne Commerce of the U.S. Reports for 2024 and 2025 have not been released.}

Chart 6 – Oil Spill Rate (Gallons of Oil Spilled by Tank Barges per Million Gallons Transported)



* The oil spill rates for 2024 and 2025 are projected rates.

For reference, the following table provides the tank barge commodity data from ACE from 2014 to 2023.

Table 6 – Petroleum Transported by Tank Barges per Year

Calendar Year	Petroleum Transported by Tank Barge (in short-tons)	% change (year to year)
2014	278,851,000	+2.11%
2015	282,993,000	+1.49%
2016	272,757,000	-3.62%
2017	258,582,089	-5.20%
2018	244,432,497	-5.47%
2019	245,970,000	+0.06%
2020	214,134,000	-12.9%
2021	217,009,000	+1.3%
2022	231,181,000	+6.5%
2023	228,709,000	-1.07%

Severity of Vessel Incidents

There were 1,323 incidents in 2025 involving towing vessels or barges that were investigated by the Coast Guard. All incidents for 2025 were scored using the severity scale developed by the National Quality Steering Committee (NQSC), provided on the following page for reference. Each incident is counted only once, regardless of the number of vessels involved or events recorded by the Coast Guard during the marine casualty investigation. Table 7a provides the number of towing vessel or barge incidents by NQSC Severity Class from 2020 to 2025.

Table 7a – Incidents by NQSC Severity Class

NQSC Severity Class	2021	2022	2023	2024	2025	Total
Low	964	952	1030	787	1000	4,733
Medium	109	142	145	109	190	695
High	163	151	126	156	133	729
Total	1,236	1,245	1,301	1,052	1,323	6,157

Table 7b provides a summary of the initiating event for high severity incidents, excluding the incidents where a personnel casualty was the initiating event. From 2021 to 2025, allisions and material failures/malfunctions were the initiating event in 68.5% of high severity incidents.

Table 7b – High Severity Incidents by Initiating Event

Initiating Event of High Severity Incidents, 2021-2025 (excludes High Severity incidents with a Personnel Casualty Event as the Initiating Event.)	2021	2022	2023	2024	2025	Total	% of Total
Allision	23	21	19	30	24	117	32.0%
Material Failure/Malfunction	26	16	11	19	25	97	26.5%
Collision	5	3	15	7	5	35	9.6%
Vessel Manuever	3	3	2	6	3	17	4.6%
Grounding	1	5	4	2	3	15	4.1%
Set Adrift	5	2	2	1	3	13	3.6%
Flooding - Initial	3	4	5		1	13	3.6%
Vessel Yawl/Pitch/Roll/Heel	3	2	2	2	1	10	2.7%
Fire - Initial	2	1	4	1	2	10	2.7%
Loss/Reduction of Vessel Propulsion/Steering	1	5	1	2	1	10	2.7%
Discharge/Release - Pollution	1	4	1	2		8	2.2%
Fouling		3	1			4	1.1%
Cargo/Fuel Transfer/Shift	2		1			3	0.8%
Loss of Stability				3		3	0.8%
Capsize		1	1		1	3	0.8%
Sinking		1		1		2	0.5%
Flooding - Progressive			1	1		2	0.5%
Wave(s) Strikes/Impacts				1		1	0.3%
Abandonment	1					1	0.3%
Damage to Cargo			1			1	0.3%
Explosion				1		1	0.3%

NQSC Severity Classes for Towing Vessel Casualties

Incident Severity	Description
Low	Damage: \$0 - \$50,000 or not reported No injuries or deaths Pollution: 0 - 10 gallons of oil spilled CG Casualty Class: None/Routine
Medium	Damage: \$50,001 - \$250,000 No injuries or deaths Pollution: 11 - 1,000 gallons of oil spilled CG Casualty Class: "Significant"
High	Damage: \$250,001 or more ANY injuries or deaths Pollution: 1,001 or more gallons spilled CG Casualty Class: "Serious" or "Major"

Severity of Crewmember Injuries

There were 82 incidents involving towing vessels or barges in 2025 that resulted in injuries to 88 crewmembers. Table 8 displays the number of injuries by USCG injury severity category from 2021 to 2025. For reference, the USCG Injury Severity Scale is provided on the following page.

Table 8 – Number of Injuries by USCG Injury Severity Category, 2021 to 2025

Injury Severity	2021	2022	2023	2024	2025	Total	% Total
Critical	0	2	0	1	0	3	0.6%
Severe	2	3	1	2	4	12	2.4%
Serious	24	15	6	19	9	73	14.9%
Moderate	56	40	43	56	43	238	48.6%
Minor	39	41	26	26	32	164	33.5%
Total	121	101	76	104	88	490	100.0%

Table 9 provides a breakdown of the critical, severe, and serious injuries by accident type for 2025.

Table 9 – Critical, Severe, Serious Injuries by Accident Type for 2025

Accident Type	Serious	Severe	Total
Contact Injury- Crushed between objects	2	1	3
Contact Injury- Fall onto surface	2	1	3
Contact Injury- Line handling/caught in lines	3	1	4
Contact Injury- Other	1		1
Contact Injury- Struck by Moving Object	1		1
Other Injury Type		1	1
Total	9	4	13

There were no incidents in 2025 resulting in critical injuries. Falls and line handling incidents accounted for 50% of the critical, severe, and serious injuries to towing vessel crewmembers in 2025.

USCG Injury Severity Scale

Injury Severity Scale Description and Examples	
Minor	The injury is minor or superficial. No professional medical treatment was required. Examples: Minor/superficial scrapes (abrasions); minor bruises; minor cuts; digit sprain; first degree burn; minor head trauma with headache or dizziness; minor sprain/strain
Moderate	The injury exceeds the minor level, but did not result in broken bones (other than fingers, toes or nose), loss of limbs, severe hemorrhaging, muscle, nerve, tendon or internal organ damage. Professional medical treatment may have been required. If so, the person <u>was not</u> hospitalized for more than 48 hours within 5 days of the injury. Examples: Broken fingers, toes or nose; amputated fingers or toes; degloving of fingers or toes; dislocated joint; severe sprain/strain; second/third degree burns covering 10% or less of body (if face included, move up one category); herniated disc
Serious	The injury exceeds the moderate level and requires significant medical/surgical management. The person <u>was not</u> hospitalized for more than 48 hours within 5 days of the injury. Examples: Broken bones (other than fingers, toes, or nose); partial loss of limb (amputation below elbow/knee); degloving of entire hand/arm or foot/leg; second/third degree burns covering 20-30% of body (if face included, move up one category); bruised organs
Severe	The injury exceeds the moderate level and requires significant medical/surgical management. The person <u>was</u> hospitalized for more than 48 hours within 5 days of the injury and, if in intensive care, was in for less than 48 hours. Examples: Internal hemorrhage; punctured organs; severed blood vessels; second/third degree burns covering 30-40% of body (if face included, move up one category); loss of entire limb (amputation of whole arm/leg)
Critical	The injury exceeds the moderate level and requires significant medical/surgical management. The person was hospitalized and in intensive care for more than 48 hours within 5 days of the injury. Examples: Spinal cord injury; extensive second- or third-degree burns; concussion with severe neurological signs; severe crushing injury; internal hemorrhage; second/third degree burns covering 40% or more of body; severe/multiple organ damage

This verbiage is taken from the Marine Information for Safety and Law Enforcement (MISLE) Incident Investigation Activity User Guide, which provides data entry guidance for Coast Guard Investigating Officers.

Instructions for Reviewing Incident Investigation Reports on the USCG Maritime Information Exchange

The USCG Maritime Information Exchange (CGMIX) is a public portal that provides access to Incident Investigation Reports (IIR) that have been closed by the Coast Guard.

To access an IIR:

1. Go to: <https://cgmix.uscg.mil/IIR/IIRSearch.aspx>
2. Enter the Activity Number for the IIR.



The screenshot shows the USCG Maritime Information Exchange Incident Investigation Reports search page. It features the USCG logo and a navigation bar with links: SEARCH IIR, FEATURED LINKS, WEB ACCESSIBILITY POLICY, FOIA REQUESTS, and CONTACT US. Below the navigation bar is a "Skip Navigation" link. The main heading is "SEARCH INVESTIGATION REPORTS". The search form includes fields for Activity Number, Vessel Service (a dropdown menu set to "ALL"), Involved Vessel, Involved Organization, Involved Facility, and General Keyword. There are also date range fields for Start Date Range (From: 07/27/2018, To: End Date: 07/27/2023) and buttons for Search and Reset. A disclaimer states: "This page provides reports for closed investigations of reportable marine casualties investigated by the U.S. Coast Guard from October 2002 to present. **Cases closed after October 2002 may have a start date range several years prior**". The last update is noted as Monday, July 24, 2023.

3. Click on the View Details hyperlink to see the redacted IIR.



The screenshot shows the USCG Maritime Information Exchange Incident Investigation Reports results page. It features the USCG logo and a navigation bar with links: SEARCH IIR, FEATURED LINKS, WEB ACCESSIBILITY POLICY, FOIA REQUESTS, and CONTACT US. Below the navigation bar is a "Skip Navigation" link. The main heading is "Incident Investigation Reports". The search results are displayed for Activity Number - 7383285. A notice states: "NOTICE: These search results are based on the vessels and parties listed in the investigation report. Not all vessels and parties listed were directly involved in the incidents, such as vessels providing emergency assistance or witnessing the event. Please select the link next to the Investigation Title for additional details." The results table shows one record: BAYOU DAWN - Loss of Life, with Start Date 19-Jan-2022 and End Date 14-Jul-2022. The table has columns for View Details, Title, Start Date, and End Date. Below the table, it says "1 Records Returned." and "Last Update: Monday, July 24, 2023".

View Details	Title	Start Date	End Date
View Details	BAYOU DAWN - Loss of Life	19-Jan-2022	14-Jul-2022