

TOWING VESSEL SAFETY & COMPLIANCE

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COMPLIANCE

**“It’s Not Just A Good Idea...It’s The Law”
-Albert Einstein ($E=MC^2$)**

SAFETY

**“Blood Is A Big Expense”
-GODFATHER**



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**CAVEMAN SETTING OUT
ON FIRST TOWING VESSEL
VOYAGE**



**VOYAGE ENDS IN FLAMES
RESULTING IN
DISCOVERY OF FIRE**

FIRST MARINE ACCIDENT



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Standard Safety Metrics

- Crew Fatalities
- Vessel Incidents
- Crew Injuries

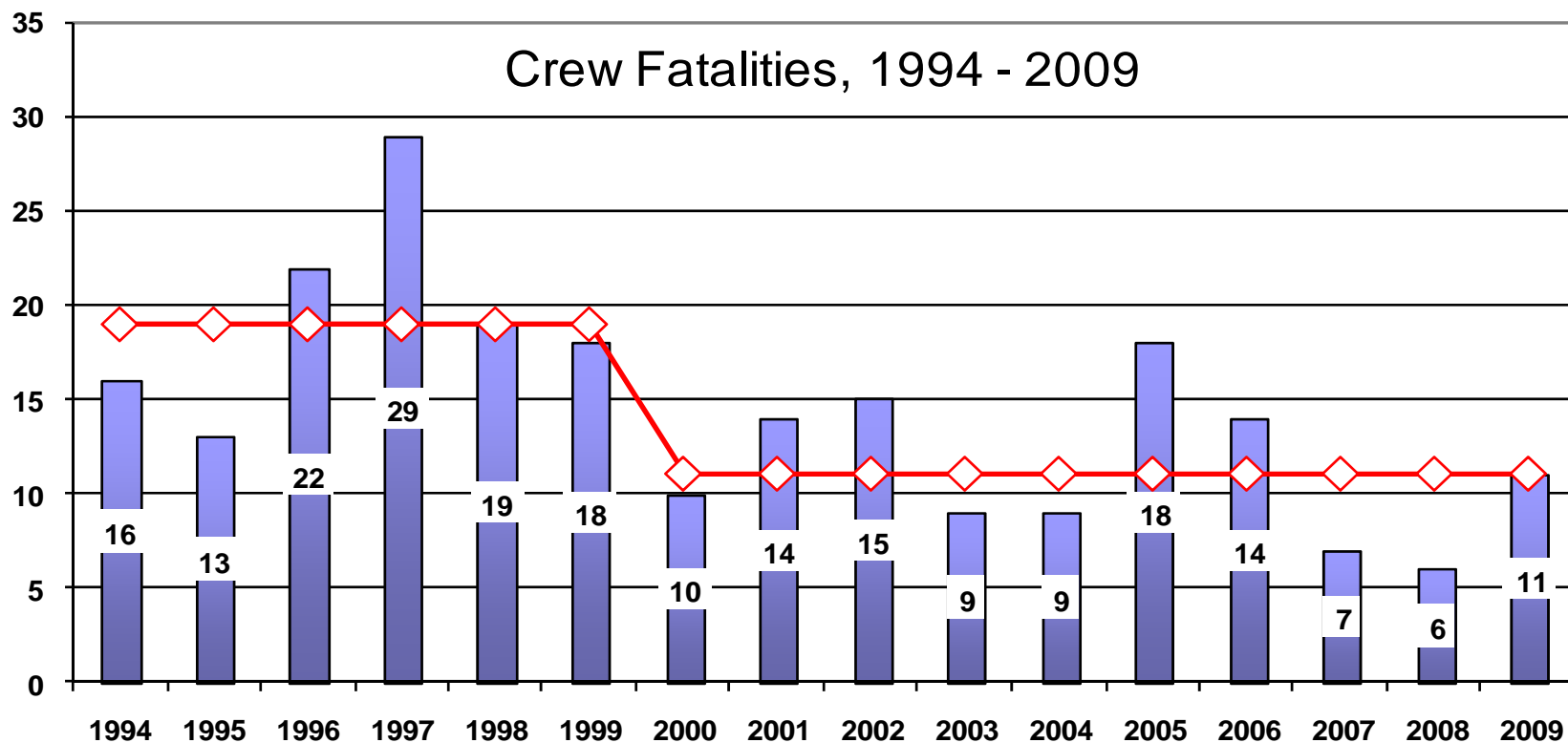


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Crew Fatalities, 1994 - 2009



Fatalities

Averages, 1994 - 1999 = 19: 2000 - 2009 = 11

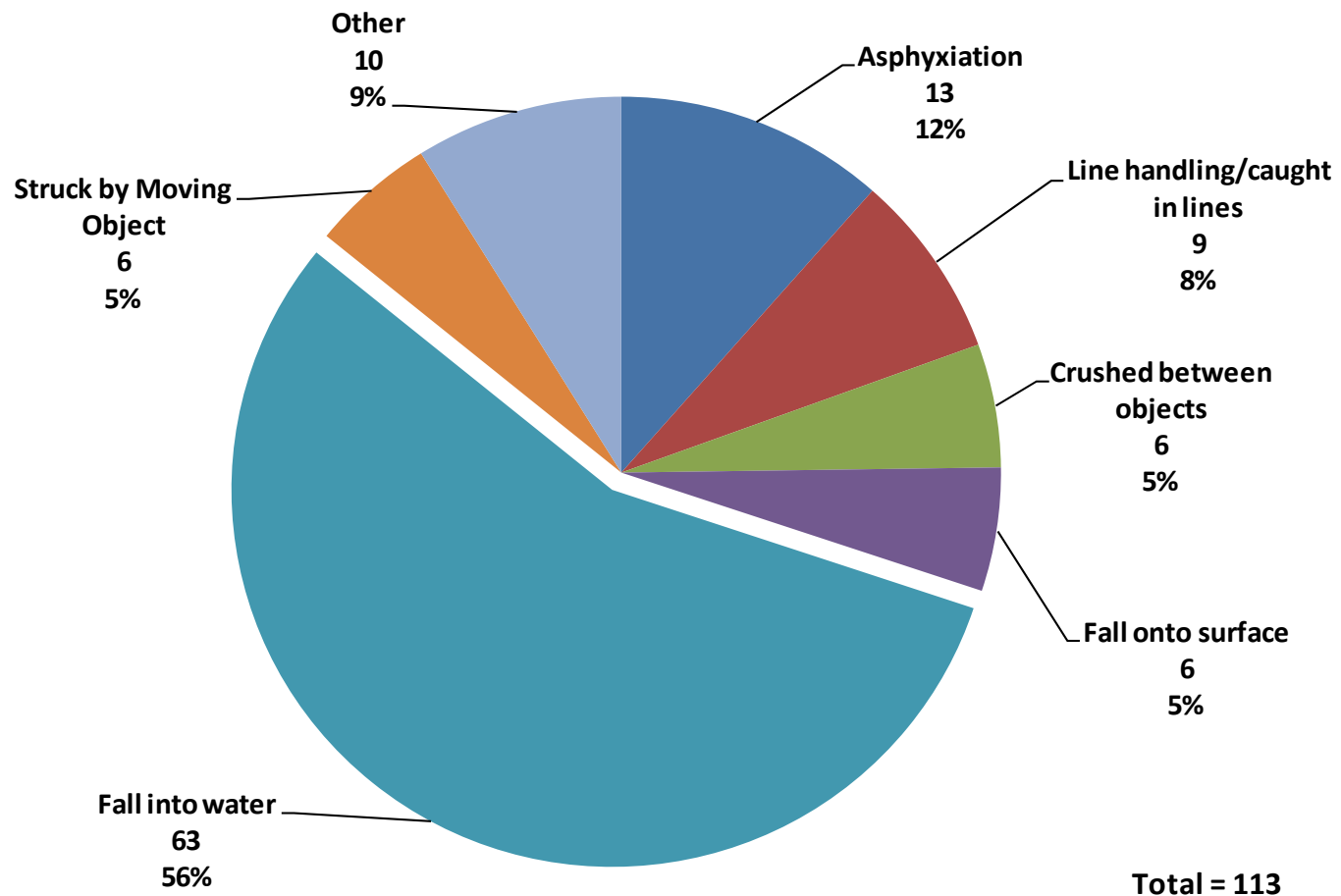


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Crew Fatalities, By Accident Type, 2000 - 2009



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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 was not 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 was not 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 was 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

Close



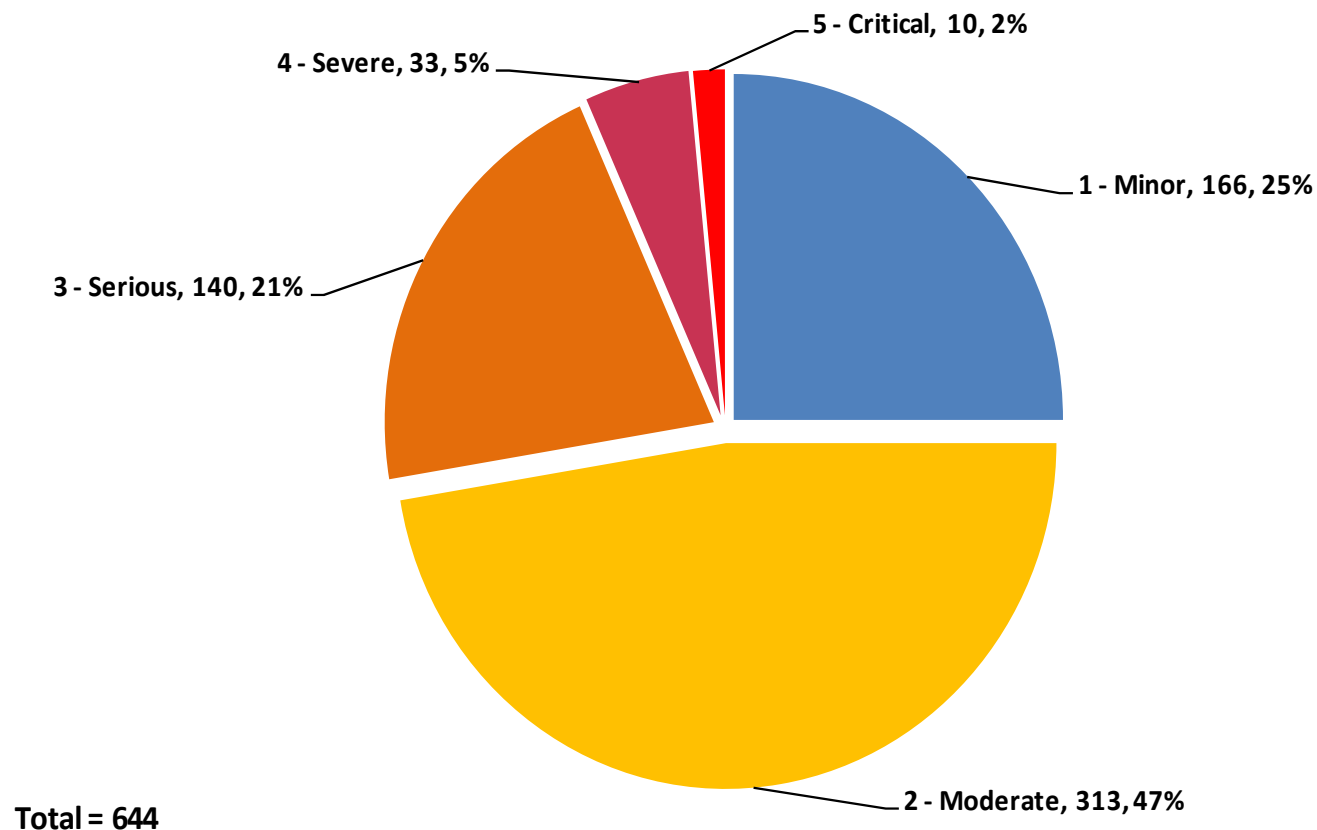
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INJURY SEVERITY

Towing Injuries By Severity, 2006 - 2009

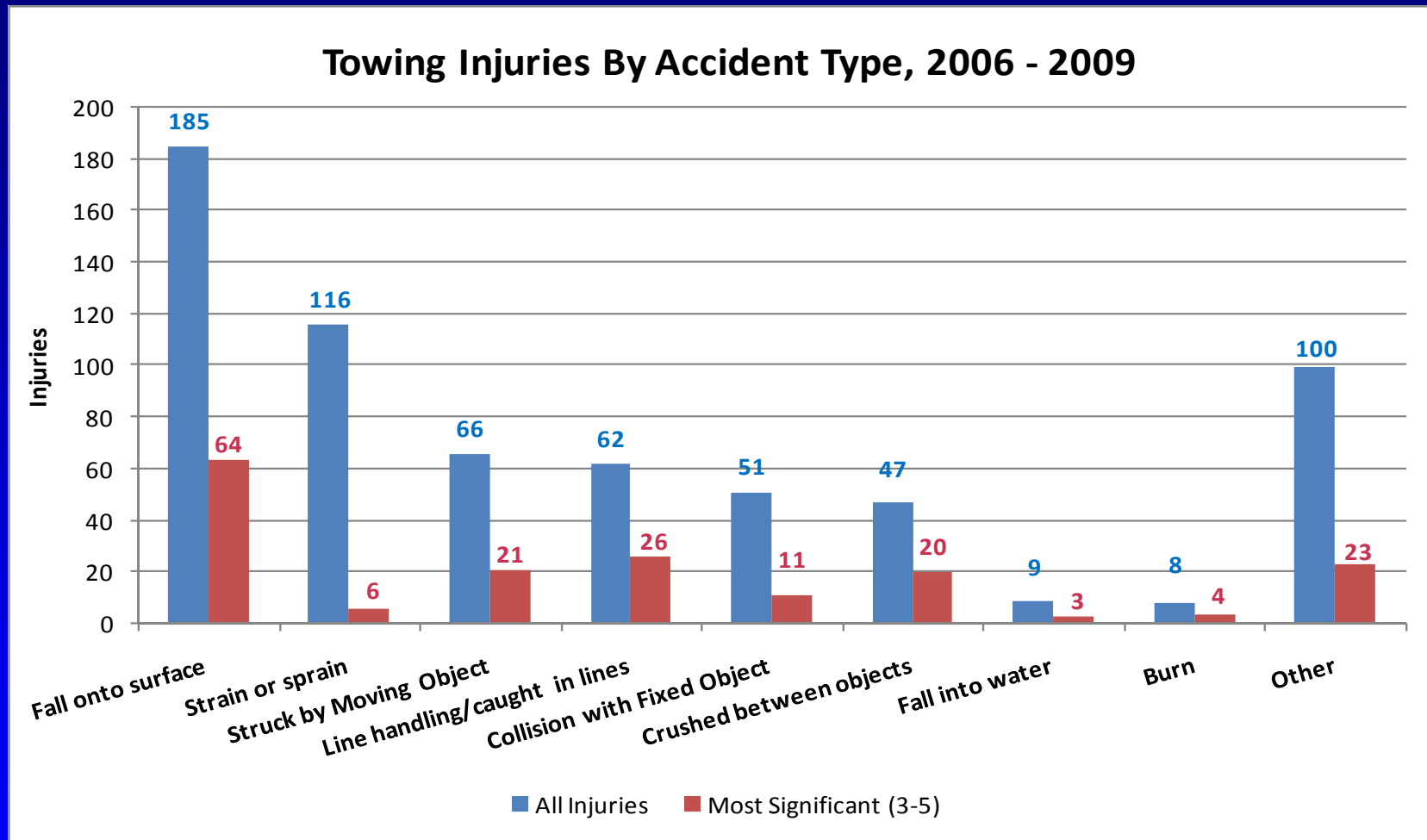


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INJURIES BY ACCIDENT TYPE



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Severity Classes for 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: 11-1000 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 Casualty Class "Serious" or "Major"

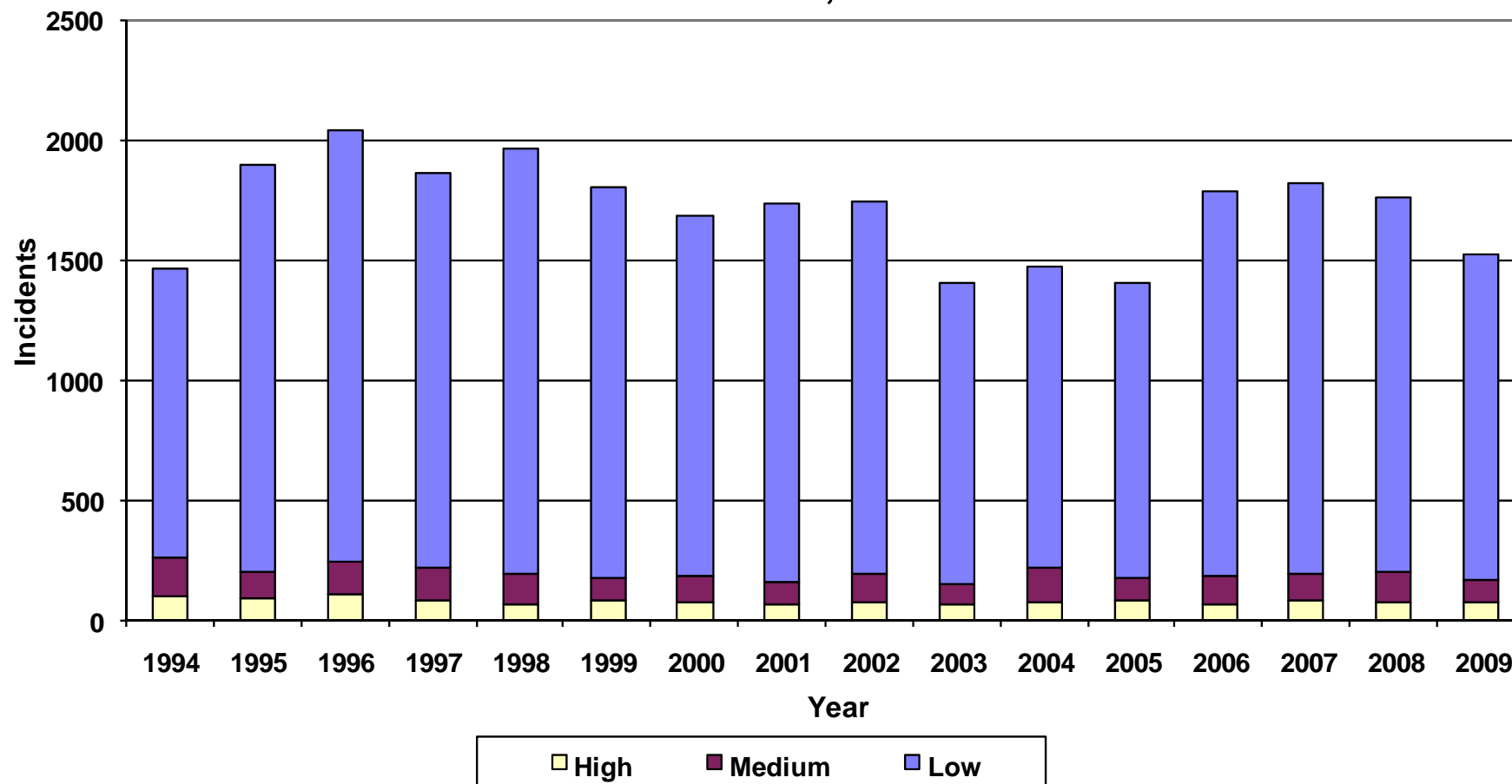


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Vessel Casualties, 1994 - 2009

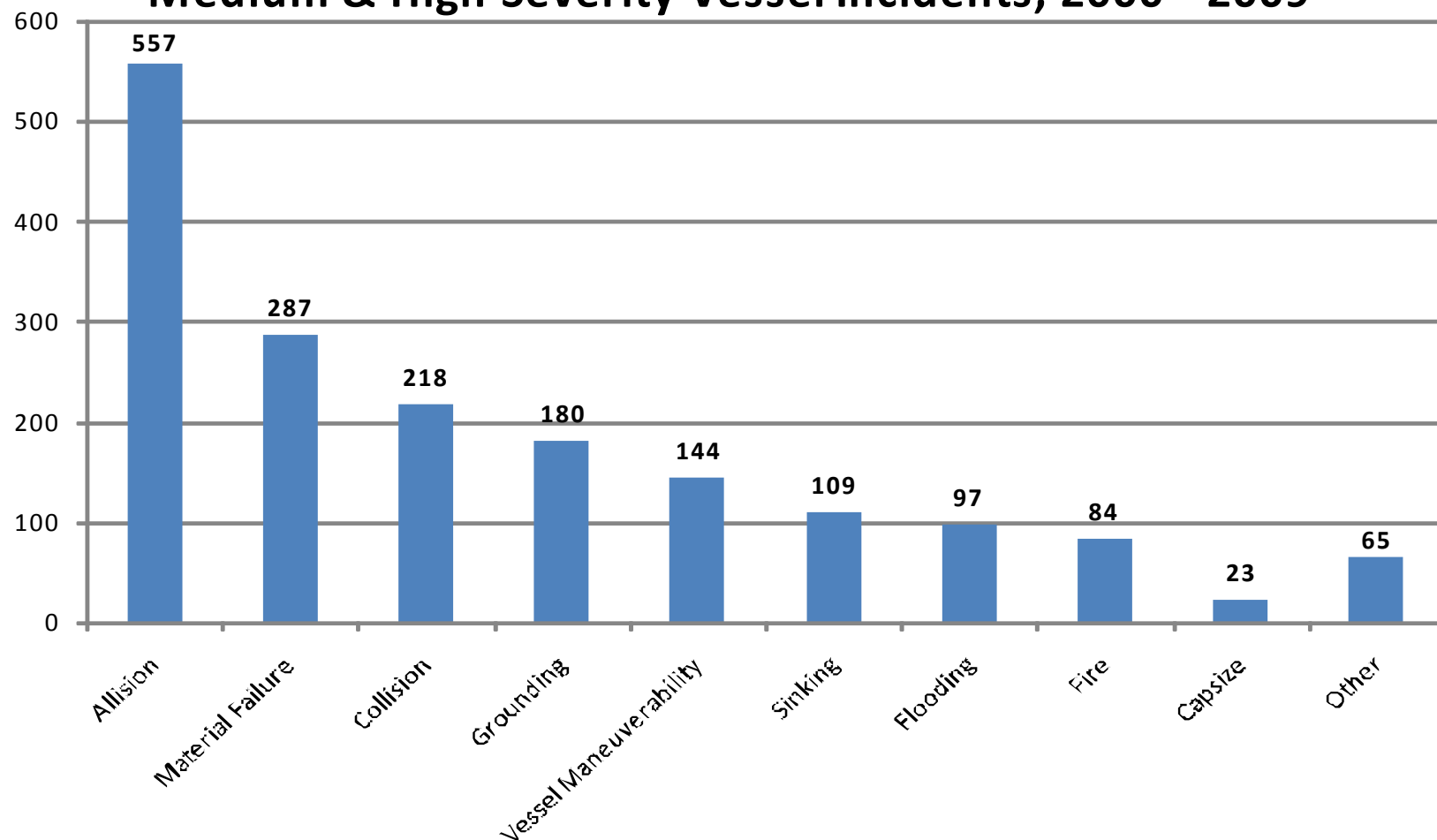


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Medium & High Severity Vessel Incidents, 2000 - 2009



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Casual Observations Suggest*

Majority of Incidents Involve Vessels:

- Under 100 FT LOA
- Under 200 GRT
- Under 2000HP
- Under 9HP (or less)/Ton
- Allisions biggest problem
- Major Causal Factor is Human Error

***unofficial review**



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TOP TEN SAFETY DEFICIENCIES

Top Ten “Towing Vessel Deficiencies” include the following:

- **General Alarm – missing placards and visual indicators**
- **Running Lights – inoperable or improper bulbs**
- **Remote Fuel Shut-Off valves-- not operable/missing at remote location**
- **Fire Detecting Control Panel – improper functioning**
- **Life Buoys – improper or faded markings**
- **Fire Pumps – lack of remote start fixed pumps/storage of portable pumps**
- **Vessel Response Program – equipment and trained crew**
- **Vessel Security Plan – lack of plan and / or drills**
- **Wiring Materials & Installs – exposed wiring / loose junction boxes**
- **Guards for Exposed Hazards – missing machine guards**



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Towing Vessel Bridging Program (TVBP)

(Sub-Chapter "C" COMPLIANCE)

Pre-Subchapter "M"

Post-Subchapter "M"

UNINSPECTED TOWING VESSEL

SAFETY EXAMINATION

UTV

ROUTE

☐ Inland
☐ Coastal
☐ Oceans
☐ Great Lakes

☐ MTSA Regulations Apply

EXPIRES

2012 ☐
2013 ☐
2014 ☐
2015 ☐

U.S. Department of Homeland Security

THIS VESSEL MEETS ALL USCG UNINSPECTED TOWING VESSEL REGULATIONS

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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United States of America
Department of Homeland Security
United States Coast Guard

Certification Date: 07 May 2007
Expiration Date: 07 May 2007
IMO Number: 720447

Certificate of Inspection

Vessel Name CONSTITUTION	Official Number 538087	Call Sign WCX4509	Service Towing Vessel
Building Port WILMINGTON DE	Hull Material Steel	Horsepower 11128	Propulsion Diesel Reduction
Place Built SLIDELL LA, UNITED STATES	Delivery Date 15Dec1971	Gross Tonnage R-472 D	Net Tonnage R-461 D
		DWT 1548	Length R-133.2 D

Owner
MARITRANS CONSTITUTION CO
TWO HARBOUR PLACE
AVE 12FL
TAMPA, FL 33602

Operator
MARITRANS OPERATING COMPANY LP
302 KNIGHTS RUN AVE
1200
TAMPA, FL 33602
UNITED STATES

SUITE

This vessel must be manned with the following licensed and unlicensed personnel. Included in which there must be 2 certified lifeboatmen, 0 certified tankermen, 0 HSC type ratings, and 0 GMDSS Operators.

1 Master Chief Mate 2nd Mate/CICNW 3rd Mate/CICNW	Master & 1st Class Pilot 2 Lic. Mate/CICNW 1st Class Pilot	Radio Officers 2 Able Seamen/ROANW 1 Ordinary Seaman Deckhands	1 Chief Engineer 1st Asst. Engr/2nd Engr. 2nd Asst. Engr/3rd Engr. 3rd Asst. Engr. Lic. Engr.	GMDSS Rating Oilers 2 ASST
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In addition, this vessel may carry 0 passengers, 2 other persons in crew, 9 persons in addition to crew, and no others. Total persons allowed: 20

Route Permitted and Conditions of Operation:

---Oceans---

NOT ON AN INTERNATIONAL VOYAGE.

WHEN OPERATING ON VOYAGES OF LESS THAN 400 MILES, THE MINIMUM CREW MAY BE REDUCED TO THE FOLLOWING:

1 MASTER	1 CHIEF ENGINEER	1 ABLE SEAMAN
2 MATES	1 ASST ENGINEER	1 ORDINARY SEAMAN
2 OTHER PERSONS IN CREW		11 PERSONS IN ADDITION TO CREW

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at Philadelphia, PA, the Officer in Charge, Marine Inspection, Philadelphia, Pennsylvania certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Quarterly Reinspections			This Amended certificate issued by:	
Date	Zone	A/P/Q	Signature	
				B. M. SALERNO, CAPT, USCG
				Officer in Charge, Marine Inspection
				MSO BOSTON
				Inspection Date

Dep. of Home Sec., 10132, C10-001 (Rev. 4-000000)

OMB No. 1511-0027



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Current TVBP Plan

A phased approach...

Phase I

Summer 2009

Outreach & Education

Industry Initiated Exams

USCG Personnel Training

Phase II

18-24 Months later

Risk Based Exams

USCG Personnel Training (cont.)

Phase III

Sub-Chapter “M”

COI Issuance



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National Centers of Expertise

Vintage Vessels★

Suspension &
Revocation★

Towing Vessels★

Gas Carriers★

Investigations

Outer
Continental
Shelf

Cruise
Ships★



TOWING VESSEL NATIONAL CENTER OF EXPERTISE

VISION

Be the Coast Guard's forward thinking center for the towing industry to keep all towing industry stakeholders well informed and prepared to operate safely and compliant.

MISSION

Provide technical and operational advice to both the Coast Guard AND industry to enhance collective competencies.



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FUNCTIONS

- **Facilitate Towing Vessel Bridging Program.**
- **Train Coast Guard Examiners by developing and teaching relevant courses.**
- **Conduct Outreach and foster partnerships.**
- **Repository for policy and guidance.**



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FUNCTIONS (continued)

- **Interpret or clarify policy, guidance , and regulations**
- **Ensure a high level of applied consistency CG-wide**
- **Gather, organize, provide statistical information**
- **Research towing vessel issues/ onsite assistance**



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CONTACT TVCOE

Commanding Officer

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Technical Specialist

Mr. Bill Perkins

William.G.Perkins@uscg.mil

Towing Vessel National Center of Expertise

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Paducah, KY 42001

(270) 444-7715

<http://www.uscg.mil/hq/cg5/cg54ti/TVNCOE.asp>



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Coast Guard Resources

USCG HOMEPAGE--- <http://homeport.uscg.mil>

Path= “Missions”>”Domestic Vessels”>“Uninspected Vessels”>”Towing Vessels”.....

Of Importance See 2 Separate Items:

...>”Towing Vessel Bridging Program”>“UTV Exam Form” (.pdf)
AND/OR

...>“Requirements for Uninspected Towing Vessels Guide Book”
(.pdf)

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