Invisible BARD Accidents Continue to Claim Lives

31 October 2014

Boat and marine drive manufacturers have a legal, moral, and regulatory duty to monitor their products after sale for previously unknown safety risks, to report significant post sale safety issues to the Coast Guard, and to take appropriate actions, including warning customers and recalling products when necessary.

The best external source for most recreational boat and marine drive manufacturers trying to identifying accidents involving theirs or similar products is often the annual U.S. Coast Guard Boating Accident Report Database (BARD).

As many as 32 to 45 percent of accidents annually reported to USCG are currently invisible in the version of BARD supplied to marine manufacturers and made available to boating safety professionals.

The “invisible” accidents are from states baring their accidents from inclusion in **Releasable BARD** (also called Public BARD) and accidents reported to USCG that did not meet BARD reporting requirements or are specifically excluded from BARD, **see accompanying charts**.

USCG estimates almost all fatalities and about 2/3 of hospitalized injuries are reported. Some studies have shown much lower reporting rates.

With significant under reporting, blocking over 10,000 reported accidents from view significantly hinders efforts of manufacturers and safety professionals to identify previously unrecognized accident scenarios. As a result, **it takes longer to discover emerging accident scenarios at the expense of boaters lives.**

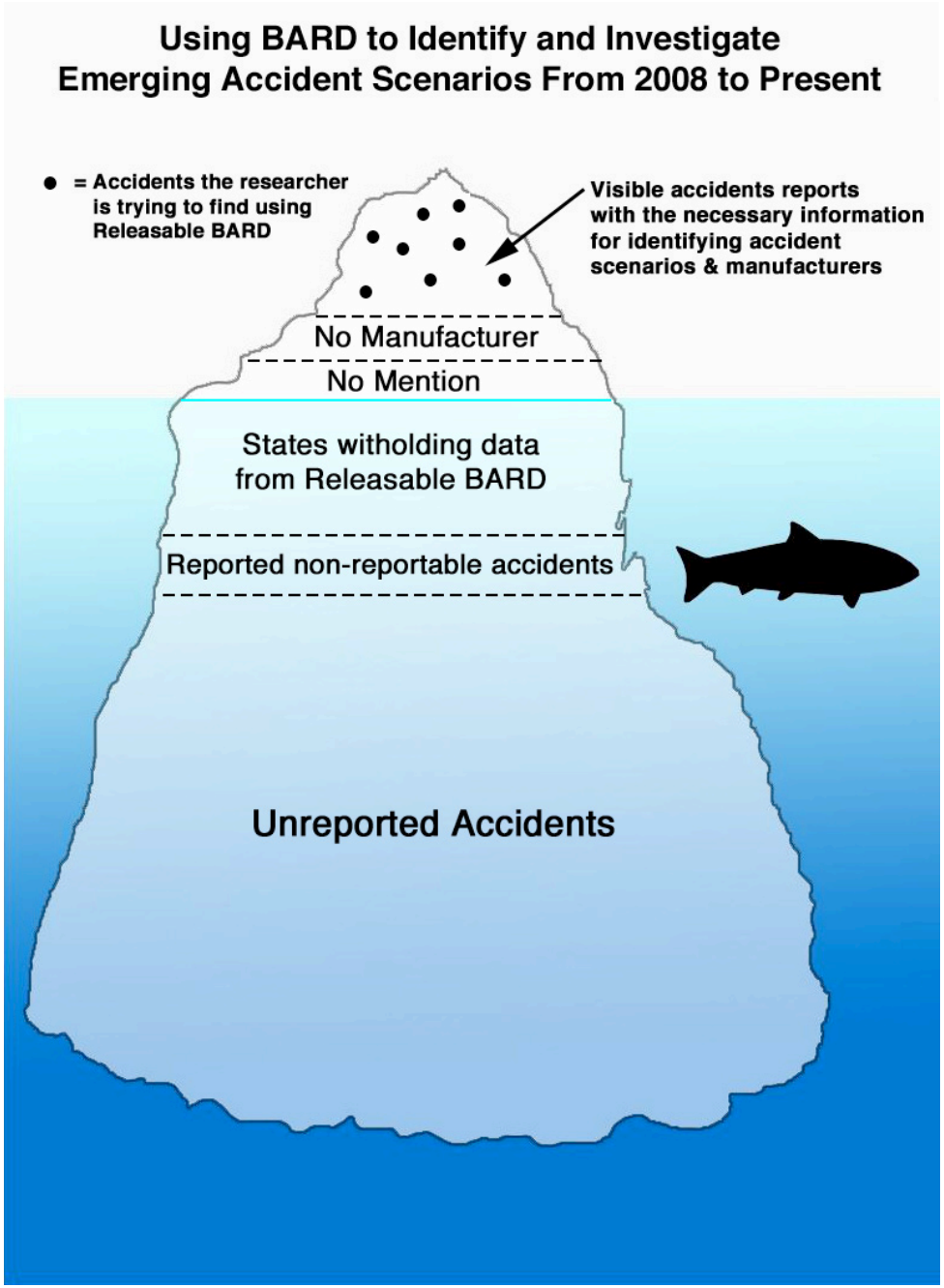
Technically, it would be quite easy to make the additional accidents accessible to boat builders, marine drive manufacturers, and boating safety professionals. Additional details are available in our recently released series of posts on boating industry manufacturer’s duty to monitor the safety of their products after sale. We just need assistance from the organizations involved to make these accidents visible.

Some say the industry wants to keep the closet door closed on these currently invisible accidents and does not want boating safety advocates shining their lights around in there. Prove them wrong, do the right thing, open the door.

We call upon the National Boating Safety Advisory Council (NBSAC), boat manufacturers, marine drive manufacturers, the States, and the U.S. Coast Guard Office of Boating Safety to work together to make the invisible accidents visible and prevent the needless loss of more lives.

Gary Polson
PropellerSafety.com

Introduction to the series of posts supporting these statements.



Limitations to Using BARD to Identify Accident Scenarios Not Specifically Classified by BARD

U.S. Coast Guard's Boating Accident Report Database (BARD) is used by researchers to identify accident scenarios not specifically classified by BARD.

This is accomplished by searching Releasable BARD, the annual version available to researchers. Redacted narratives (privacy information removed) are reviewed to find accidents meeting the researcher's criteria. Sometimes searches are limited to redacted narratives in certain categories of accidents classified by BARD. For example, researchers trying to identify accidents in which someone struck a dredge pipe might limit their search to BARD categories in which the vessel struck a floating, submerged, or fixed object.

Redacted narratives are only available in Releasable BARD for accidents from 2008 through the last issue of Public BARD (typically in May or June of the following year). Many accident reports do not identify the boat or marine drive manufacturer. In some instances, even though the specific scenario being searched for did occur, it is not mentioned in the redacted narrative. That leaves researchers searching redacted narratives at the very peak of the iceberg (accidents from 2008 though the last annual release in states that allow their data to be included, in which manufacturers are identified).

As to the portion of the iceberg invisible to researchers:

Many states withhold their data from Releasable BARD for privacy reasons. Almost half the states failed to release their accidents in 2010.

Reported non-reportable accidents are accidents reported to USCG but not meeting BARD requirements or specifically excluded from being reported. These include small commercial boats, small government boats, and boats being tested by dealers or mechanics.

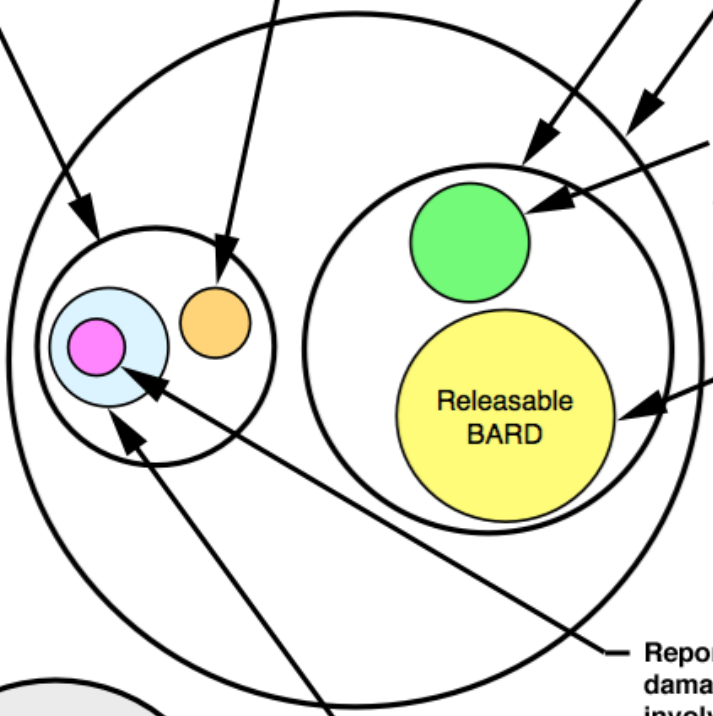
Unreported accidents are accidents meeting BARD reporting criteria, but not reported to the Coast Guard.

by Gary Polson **PropellerSafety.com**

USCG BARD Database

Not to Scale

(number) = total number of accidents
from 2009 through 2013



Reported non-reportable accidents
(4,385)

Reported accidents not meeting requirements to be in Reportable BARD
(2,943)

Reportable BARD
(22,499)

Entire database as seen by USCG
(26,884)

Reported accidents meeting requirements to be in Reportable BARD from States withholding data from Releasable BARD
(5,801)

Releasable BARD
(BARD database as seen by boat and marine drive manufacturers, and safety professionals)
(16,698)

Reported accidents involving casualties or damage that occur when the only vessel(s) involved are used solely for governmental, commercial, or criminal activity
(847)

Accidents Not Reported

Reported accidents excluded from Reportable BARD
(1,442)

25 October 2014

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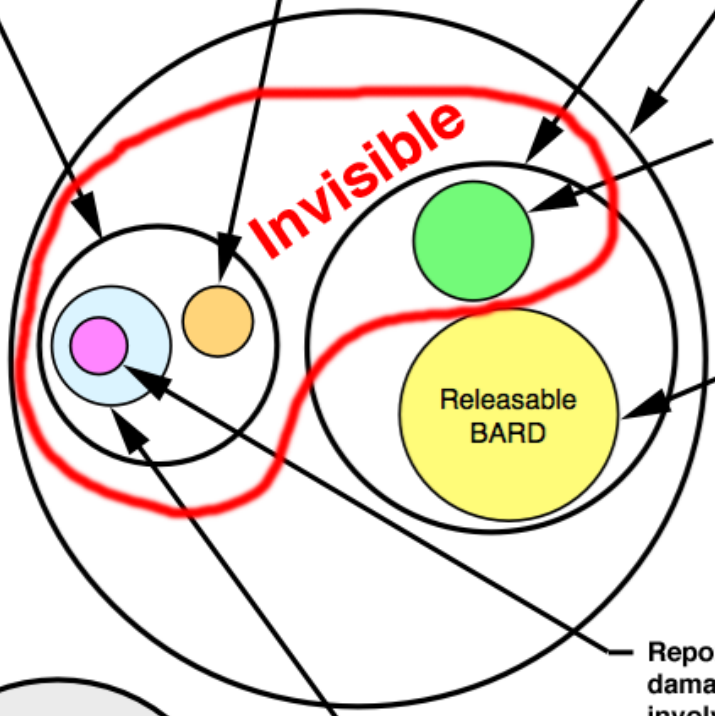
USCG BARD Database
Invisible Accidents

Not to Scale

(number) = total number of accidents from 2009 through 2013



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Accidents Not Reported

Reported accidents excluded from Reportable BARD (1,442)

We see 16,698 accidents, USCG sees 26,884
Over 10,000 reported accidents are invisible

25 October 2014

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Appendix

Page H6 - BARD Accidents by Category spreadsheet

Pages H7-H10 are 2013 USCG data sources for specific lines on Page 5. The data and line numbers are highlighted.

Page H7 - Releasable BARD Accident Count 2013
Page H8 - USCG 2013 Recreational Boating Statistics (RBS) cover
Page H9 - USCG 2013 RBS Executive Summary
Page H10 - USCG 2013 RBS Non-Reportable Scenarios with their Casualty

Page H11 - States & Territories Not Reporting Accidents to Releasable BARD

BARD accident counts by category	**Row Numbers**						
					YEAR		
Category (all the categories were reported)		**2009**	**2010**	**2011**	**2012**	**2013**	**Total**
Accidents not meeting requirements to be in Reportable BARD (from USCG table)	1	686	667	594	573	423	**2,943**
Government, commercial, criminal vessels (from USCG table)	2	146	203	204	139	155	**847**
Reportable BARD (from USCG annual introduction)	3	4730	4604	4588	4515	4062	**22,499**
Reported Non-reportable accidents (from USCG table)	4	933	1006	923	870	653	**4,385**
Entire db as seen by USCG (Reportable plus Non-reportable) Row 3 + Row 4	5	5663	5610	5511	5385	4715	**26,884**
Excluded from Reportable BARD (Non-reportable minus not meeting requirements to be in Reportable BARD) Row4 - Row1	6	247	339	329	297	230	**1,442**
Releasable BARD (count the ones in the actual Releasable BARD database)	7	3798	2694	3591	3514	3101	**16,698**
Accidents meeting requirements to be in Reportable BARD, but states withheld (Reportable less Releasable) Row 3 - Row 7	8	932	1910	997	1001	961	**5,801**
Number of Invisible accidents (Reportable plus Non-reportable minus Releasable) Row 3 + Row 4 - Row 7	9	1865	2916	1920	1871	1614	**10,186**
Row numbers in calculations above refer to row numbers in the column of data titled Row Numbers							
USCG table = the non-reportable page in the USCG annual recreational boating statistics							
USCG Intro = annual introduction and executive summary to the USCG annual recreational boating statistics							
This table is much easier to understand when viewed with the accompanying chart.							
by Gary Polson, PropellerSafety.com 16 October 2014.							

Releasable BARD Accident Count 2013

ReleaseableAccidents : Table

	BARDID	Year	Time	Narrat
+	WV-2013-0009	2013	2:30:00 PM	VESSEL ONE WAS FOLLOWING VES
+	WV-2013-0011	2013	10:30:00 AM	OPERATOR LEFT BOAT RAMP WITHC
+	WV-2013-0012	2013	11:35:00 PM	VESSEL WAS ADRIFT AT NIGHT AND
+	WV-2013-0013	2013	8:00:00 PM	OCCUPANT AND OPERATOR WERE F
+	WV-2013-0014	2013	1:37:00 PM	OPERATOR WAS ENTERING RAPID V
+	WV-2013-0015	2013	9:00:00 AM	COMMERCIAL VESSEL WAS PUSHIN
+	WV-2013-0016	2013	4:10:00 PM	INJURED WAS WAKE BOARDING BEH
+	WV-2013-0018	2013	3:45:00 PM	3 PEOPLE WERE PADDLING DOWNS
+	WY-2013-0001	2013	12:00:00 PM	A wind storm caught operator off guard a
+	WY-2013-0002	2013	6:15:00 PM	One 16 foot Bluefin aluminum boat with
+	WY-2013-0003	2013	5:00:00 PM	On July 22, 2013, at approximately 1100
+	WY-2013-0004	2013	12:40:00 PM	On arrival I identified the victim as Opera
+	WY-2013-0007	2013	4:00:00 PM	The boat was driven by the victim's fathe
+	WY-2013-0008	2013	7:10:00 AM	The individuals launched the boat at Wh

Line 7

Record: 3101 of 3101

Screen capture from the 2013 Releasable BARD accidents table.
3,101 accidents were released.

This number (3,101) appears in our BARD Accident Counts by Category Table in the 2013 column on Line 7.

2013 Recreational Boating Statistics

COMDTPUB P16754.27
U.S. Department of Homeland Security
U.S. Coast Guard
Office of Auxiliary and Boating Safety

BOAT Responsibly

2013 EXECUTIVE SUMMARY

Line 3

- In 2013, the Coast Guard counted 4,062 accidents that involved 560 deaths, 2,620 injuries, and approximately $39 million dollars of damage to property as a result of recreational boating accidents.
    - The fatality rate was 4.7 deaths per 100,000 registered recreational vessels. This rate represents a 13% decrease from last year's fatality rate of 5.4 deaths per 100,000 registered recreational vessels.
    - Compared to 2012, the number of accidents decreased 10%, the number of deaths decreased 14%, and the number of injuries decreased 12.7%.
- Where cause of death was known, seventy-seven (77) percent of fatal boating accident victims drowned. Of those drowning victims with reported life jacket usage, eighty-four (84) percent were not wearing a life jacket.
- Where instruction was known, twenty (20) percent of deaths occurred on boats where the operator had received boating safety instruction. Only thirteen (13) percent of deaths occurred on vessels where the operator had received boating safety instruction from a course provider offering a course meeting the U.S. Coast Guard-recognized national standards.
- Eight out of every ten boaters who drowned were using vessels less than 21 feet in length.
- Operator inattention, improper lookout, operator inexperience, excessive speed, and machinery failure rank as the top five primary contributing factors in accidents.
- Alcohol use is the leading known contributing factor in fatal boating accidents; where the primary cause was known, it was listed as the leading factor in 16% of deaths.
- Twenty-two children under age thirteen lost their lives while boating in 2013. Eight children or approximately thirty-six (36) percent of the children who died in 2013 died from drowning. Five children or 62.5% of those who drowned were not wearing a life jacket as required by state and federal law.
- Where data was known, the most common types of vessels involved in reported accidents were open motorboats (46%), personal watercraft (18%), and cabin motorboats (17%).
- The 11,993,067 recreational vessels registered by the states in 2013 represent a 0.9% decrease from last year when 12,101,936 recreational vessels were registered.

Table 3 Non-Reportable Scenarios with their Casualty Count 2013					
Does not meet Coast Guard policy	Accidents	Deaths	Injuries	Vessels Lost	Damages
A person dies or is injured from natural causes while aboard a vessel where the vessel did not contribute to the casualty	1	1	0	0	$0
A person dies, is injured, or is missing as a result of jumping, diving, or swimming for pleasure from an anchored, moored, or docked vessel	5	3	2	0	$0
A person dies, is injured, or is missing as a result of self-inflicted wounds, alcohol poisoning, gunshot wounds, or the ingestion of drugs, controlled substances, or poison	1	1	0	0	$0
A person dies, is injured, or is missing as a result of swimming to retrieve an object or a vessel that is adrift from its mooring or dock, having departed from a place of inherent safety, such as the shore or pier	5	4	1	0	$0
Casualties or damage that occur during accidents that only involve watercraft that have not been deemed a vessel	2	1	1	0	$0
Casualties or damage that occur when the only vessel(s) involved are being used solely for governmental, commercial, or criminal activity **Line 2**	155	13	103	6	$1,040,540
Casualties or damage that occur when the only vessel(s) involved are foreign vessels and thus not subject to U.S. federal reporting requirements	1	4	0	0	$150,000
Casualties that result from a person climbing aboard an anchored vessel from the water or swimming near an anchored vessel	3	0	3	0	$0
Casualties that result from falls from or on docked vessels or vessels that are moored to a permanent structure	7	2	5	0	$0
Casualty or damage that results when the vehicle used for trailering the vessel fails	1	0	0	0	$26,000
Fire or explosions on anchored, docked, or moored boats where the cause of the fire was not attributed to the vessel or vessel equipment	1	0	0	1	$0
Property damage occurs or a person dies, is injured, or is missing as a result of a fire on shore or a pier that spreads to a vessel or vessels	1	0	0	0	$70,000
Property damage occurs or a person dies, is injured, or is missing while preparing a vessel for launching or retrieving and the vessel is not on the water and capable / ready for its intended use	3	1	0	0	$9,695
Property damage occurs to a docked or moored vessel due to lack of maintenance on the vessel or the structure to which it was moored	22	0	0	1	$157,700
Property damage occurs to a docked or moored vessel due to theft or vandalism	5	0	1	0	$12,100
Property damage occurs to a docked or moored vessel or a person dies, is injured, or is missing from such a vessel as a result of storms, or unusual tidal or sea conditions; and when a vessel gets underway in those conditions in an attempt to rescue person	17	0	0	3	$90,330
Does not meet federal reporting requirements **Line 1**	423	0	34	0	$322,928
Total **Line 4**	653	30	150	11	$1,879,293

States Not Reporting to Releasable BARD 2008-2013

States & Territories not reporting accidents to Releasable BARD							
PropellerSafety.com 16 October 2014							
orange cell = did not report to Releasable BARD that year							
State	2008	2009	2010	2011	2012	2013	
AK							
AL							
AR							
AT							
AZ							
CA							
CM							
CO							
CT							
DC							
DE							
FE							
FL							
GA							
GL							
GM							
GU							
HI							
IA							
ID							
IL							
IN							
KS							
KY							
LA							
MA							
MD							
ME							
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ND							
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NM							
NV							
NY							
OH							
OK							
OR							
PA							
PC							
PR							
RI							
SC							
SD							
TN							
TX							
UT							
VA							
VI							
VT							
WA							
WI							
WV							
WY							
2008-2012 data derived from Investigative Reporters and Editors BARD states table							
2013 data comes from 2013 Recreational Boating Statistics							