North Atlantic Right Whale Causes of Death for Confirmed Carcasses

Year	Month	NARW ID	Sex	Location First Observed Dead	Country First Observed Dead	Preliminary Cause of Death
2017	April	#4694	F	Barnstable, MA	USA	Vessel strike (blunt force trauma)
2017	June	#3746	М	Gulf of St Lawrence	Canada	Undetermined; could not be examined
2017	June	Glacier #1402	М	Gulf of St Lawrence	Canada	Suspect vessel strike (blunt force trauma)
2017	June	Panama #3190	М	Gulf of St Lawrence	Canada	Undetermined; advance decomposition
2017	June	Starboard #3603	F	Gulf of St Lawrence	Canada	Acute entanglement (gear present; anchored)
2017	June	Contrail #3512	F	Gulf of St Lawrence	Canada	Undetermined; could not be examined
2017	June	#1207	М	Gulf of St Lawrence	Canada	Probable vessel strike (blunt force trauma)
2017	July	Unk	М	Gulf of St Lawrence	Canada	Probable vessel strike (blunt force trauma)
2017	July	Peanut #2140	М	Gulf of St Lawrence	Canada	Suspect vessel strike (blunt force trauma)
2017	July	Alien #2630	М	Newfoundland	Canada	Undetermined; could not be examined
2017	July	Unk	F	Newfoundland	Canada	Undetermined; could not be examined
2017	July	Mystique #1911	F	Newfoundland	Canada	Undetermined; could not be examined
2017	August	Unk	М	Martha's Vineyard, MA	USA	Probable entanglement
2017	August	Couplet #2123	F	Cape Cod, MA (offshore)	USA	Undetermined; could not be examined
2017	September	#4504	F	Gulf of St Lawrence	Canada	Acute entanglement (gear present)
2017	October	Unk	М	Nashawena Island, MA	USA	Suspect entanglement
2017	November	Picasso #2611	F	Martha's Vineyard, MA	USA	Undetermined; advance decomposition
2018	January	#3893	F	Virginia Beach, VA (offshore)	USA	Chronic entanglement (gear present)
2018	August	#4505	М	Monomoy, MA	USA	Probable entanglement
2018	October	#3515	F	Nantucket, MA (offshore)	USA	Probable acute entanglement
2019	June	Wolverine #4023	М	Gulf of St Lawrence	Canada	Suspect vessel strike (blunt force trauma)
2019	June	Punctuation #1281	F	Gulf of St Lawrence	Canada	Probable vessel strike (sharp force trauma)

2019	June	Comet #1514	Μ	Gulf of St Lawrence	Canada	Probable vessel strike (blunt force trauma)
2019	June	#3815	F	Gulf of St	Canada	Undetermined; not examined
2019	June	#3329	F	Lawrence Gulf of St	Canada	Undetermined; not examined
2013	Julie	#3323	1	Lawrence	Canada	Ondetermined, not examined
2019	June	Clipper #3450	F	Gulf of St Lawrence	Canada	Probable vessel strike (blunt force trauma)
2019	June	Unk*	U	Cape Breton	Canada	Undetermined; not examined
2019	July	#3421	М	Gulf of St Lawrence	Canada	Undetermined
2019	July	Unk	М	Cape Breton	Canada	Undetermined; not examined
2019	September	Snake Eyes #1226	М	Long Island, NY(offshore)	USA	Probable acute entanglement
2020	June	#5060 (2020 Calf of #3560)	М	Elberon, New Jersey (offshore)	USA	Vessel strike (sharp and blunt force trauma)
2020	November	Unk	М	Core Banks, North Carolina	USA	Perinatal mortality
2021	February	#5130 (2021 Calf of #3230)	М	St. Augustine, Florida	USA	Vessel strike (sharp and blunt force trauma)
2021	February	Cottontail #3920**	М	Myrtle Beach, SC (offshore)	USA	Chronic entanglement (gear present)
2023	January	#5394 (2023 Calf of 3194)	М	Morehead City, NC (offshore)	USA	Perinatal mortality
2023	February	#3343	М	Virginia Beach, VA	USA	Suspect vessel strike (blunt force trauma)
2024	January	#5120 (2021 Calf of #3720)***	F	Martha's Vineyard, MA	USA	Chronic entanglement (gear present)
2024	February	2023 Calf of #4340	F	Savannah, GA (offshore)	USA	Probable vessel strike (blunt force trauma)
2024	March	2024 Calf of #1612****	U	Cumberland Island, GA	USA	Probable vessel strike (sharp force trauma)
2024	March	#1950	F	Virginia Beach, VA (offshore)	USA	Probable vessel strike (blunt force trauma)
2024	May	Unk****	U	Nova Scotia (offshore)	Canada	Undetermined; could not be examined

*This whale is not confirmed since it could not be relocated and determination of it being a re-sighted carcass was inconclusive.

** This whale was originally included as a serious injury case due to an entanglement that was first documented in October 2020 off Massachusetts, USA.

***This whale was originally included as a serious injury case due to an entanglement that was first documented in August 2022 in the Gulf of St. Lawrence, Canada.

****This whale was originally included as a serious injury case due to a vessel strike that was first

documented in January 2024 off South Carolina, USA. *****This is a presumed/probable right whale based upon photos collected in May 2024. The carcass was not examined, and no samples were collected for genetic testing.

Note: Tables represent confirmed mortalities and injuries reported in each country and do not always reflect the location of the injury or death of the animal. Carcasses may drift across national boundaries; therefore, a carcass may be sighted or reported in one country even though the mortality occurred elsewhere. Species or stocks that migrate across national boundaries often carry their illnesses, injuries, or exposures to toxins with them. For mortality, serious injury, and morbidity determinations in these species, transboundary collaboration is critical in determining the causes of injury, illness, and mortality for each animal.

North Atlantic Right Whales Initially Determined to be Seriously Injured (Last Seen Alive)

Year	Month	NARW ID	Sex	Location First Observed	Country First Observed	Initial Serious Injury Determination
2017	January	Ruffian #3530	М	off Cumberland Island, GA	USA	Entanglement
2017	July	#4123	М	off New Brunswick	Canada	Entanglement
2017	July	Mayport #4094	F	off New Brunswick	Canada	Entanglement
2017	July	Diablo #3139	F	off Nantucket, MA	USA	Entanglement
2017	July	Shelagh #4510*	F	off New Brunswick	Canada	Entanglement
2017	August	Zion #3245	М	off Gaspe, Quebec	Canada	Entanglement
2018	February	#3296	М	off Jekyll Island, GA	USA	Entanglement
2018	July	#3312	М	off New Brunswick	Canada	Entanglement
2018	July	#3843	М	off New Brunswick	Canada	Entanglement
2018	August	#3960	М	off New Brunswick	Canada	Entanglement
2018	December	#2310	М	off Nantucket, MA	USA	Entanglement
2018	December	#3208	М	off Nantucket, MA	USA	Entanglement
2019	April	Nebula #4423	М	off Orleans, MA	USA	Entanglement
2019	June	Avalanche #4440	М	off New Brunswick	Canada	Entanglement
2019	July	#3125	М	off Perce, Quebec	Canada	Entanglement
2020	January	#5010 (2020 Calf of #2360)	U	Altamaha Sound, GA	USA	Vessel Strike
2020	January	Quill #4091	F	South of Nantucket, MA	USA	Entanglement
2020	February	Dragon #3180	F	off Nantucket, MA	USA	Entanglement
2020	March	Unk	U	off Georges Bank	USA	Entanglement
2020	October	#4680	М	off Sea Bright, NJ	USA	Entanglement
2020	December	Unk	U	off Canary Islands	Spain	Dependent Calf
2021	January	#1803	М	off Georgia/Florida state border	USA	Entanglement

2021	February	Infinity #3230	F	off St. Augustine, FL	USA	Vessel Strike
2021	March	Snow Cone #3560	F	off Cape Cod Bay, MA	USA	Entanglement
2021	July	Hercules #4615	М	off New Brunswick	Canada	Entanglement
2021	December	2022 Calf of #3560**	U	off Cumberland Island, GA	USA	Entanglement
2022	May	Sundog #3823	F	off Gaspe, Quebec	Canada	Entanglement
2022	June	Meridian #1403	М	off New Brunswick	Canada	Entanglement
2022	August	#4501	М	off New Brunswick	Canada	Entanglement
2023	January	#4904	F	off Rodanthe, North Carolina	USA	Entanglement
2023	January	Argo #1218	М	off Surf City, NC	USA	Entanglement
2023	February	Bishop #4545	F	off Southern MA	USA	Entanglement
2023	June	Specs #2930	М	Gulf of St Lawrence	Canada	Entanglement
2024	March	2024 Calf of #1950***	U	off Virginia Beach, Virginia	USA	Vessel Strike
2024	June	2023 Calf of 1812	U	Gulf of St Lawrence	Canada	Entanglement
2024	July	Dropcloth #1271****	М	Gulf of St Lawrence	Canada	Entanglement
2024	August	Neptune #3301*****	М	Gulf of St Lawrence	Canada	Entanglement

*This whale had a less severe entanglement SI injury (gear was self-shed) documented in 2024 in the Gulf of St. Lawrence, Canada.

**"Dependent Calf – Serious Injury to Mother". Unless additional information proves a dependent calf survives the loss or serious injury of its mother, a confirmed case involving a dependent calf of a dead or seriously injured mother is counted as a serious injury to the calf based upon the injury to the mother (in this case entanglement).

**** "Dependent Calf – Serious Injury to Mother". Unless additional information proves a dependent calf survives the loss or serious injury of its mother, a confirmed case involving a dependent calf of a dead or seriously injured mother is counted as a serious injury to the calf based upon the injury to the mother (in this case vessel strike).

****This whale was previously documented with a less severe entanglement morbidity injury in July 2019 in the Gulf of St Lawrence, Canada.

*****This whale was previously documented with a less severe entanglement morbidity injury in September 2019 in the Bay of Fundy, Canada.

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North Atlantic Right Whale Morbidity (Sublethally Injured or III) Cases

Year	Month	NARW ID	Sex	Location First Observed	Country First Observed	Initial Morbidity (Sublethal Injury/Illness) Determination
2017	April	Iceland #1412	F	Great South Channel	Canada	Entanglement
2017	April	#4146	F	off Truro, MA	USA	Entanglement
2017	April	Resolution #3532	М	Great South Channel	USA	Entanglement
2017	April	#4425	М	Cape Cod Bay, MA	USA	Entanglement
2017	June	Cello #1820	М	off New Brunswick	Canada	Entanglement
2017	July	Ergo #1317	М	off New Brunswick	Canada	Entanglement
2017	July	G048	U	off New Brunswick	Canada	Entanglement
2017	July	Nantucket #1971	М	off New Brunswick	Canada	Entanglement
2017	July	Arpeggio #2753	F	Gulf of St. Lawrence	Canada	Entanglement
2017	August	Sirius #3660	Μ	Gulf of St Lawrence	Canada	Unknown Injury
2017	August	#4617	F	Cape Cod Bay, MA	USA	Entanglement
2017	October	#2145	F	off Mt. Desert Rock, ME	USA	Poor Body Condition
2018	February	#1708	М	Cape Cod Bay, MA	USA	Entanglement
2018	February	Silt #1817	F	Cape Cod Bay, MA	USA	Entanglement
2018	February	Ravine #3142	F	South of Nantucket, MA	USA	Poor Body Condition
2018	April	Bongo #3623	М	Massachusetts Bay	USA	Entanglement
2018	May	Javelin #1112	М	Great South Channel	USA	Entanglement
2018	June	#4720	U	Gulf of St. Lawrence	Canada	Entanglement
2018	July	Gully #4601	F	off New Brunswick	Canada	Entanglement
2018	July	Dyad #4180	F	Gulf of St. Lawrence	Canada	Entanglement
2018	September	Seamount #4457	М	Gulf of St Lawrence	Canada	Entanglement
2018	November	Unidentified whale-2018	U	Stellwagen Bank, MA	USA	Poor Body Condition
2018	November	Champagne #3904	F	South of Nantucket, MA	USA	Entanglement
2018	November	Katz #1804	М	Southern New England	USA	Poor Body Condition
2019	June	Twister #3510	М	off Perce, Quebec	Canada	Entanglement
2019	July	Lemur #3380	М	Gulf of St Lawrence	Canada	Entanglement

2019	August	Zero #3908	F	Bay of Fundy	Canada	Entanglement
2019	September	Freckles #4308	F	Southern New England	USA	Entanglement
2019	December	#3466	М	South of Nantucket, MA	USA	Entanglement
2020	January	Wavy Gravy #1627	М	Southern New England	USA	Entanglement
2020	February	Aphrodite #1701	F	off Provincetown, MA	USA	Entanglement
2020	February	Batman #1017	М	Cape Cod Bay, MA	USA	Vessel Strike
2020	June	Manta #1507	М	Gulf of St. Lawrence	Canada	Entanglement
2020	July	Agave #5001 (2020 Calf of 3101)	М	off New Brunswick	Canada	Unknown Injury
2021	March	El #1209	F	Massachusetts Bay	USA	Vessel Strike
2021	April	Calvin #2223	F	Massachusetts Bay	USA	Entanglement
2021	Jun	#3550	М	Gulf of St Lawrence	Canada	Entanglement
2021	July	Katahdin #4633	F	Gulf of St Lawrence	Canada	Entanglement
2021	Sep	Scarf #1429	М	Gulf of St Lawrence	Canada	Entanglement
2022	January	#5201 (2022 Calf of #1301)	Μ	off Brunswick, GA	USA	Poor Body Condition
2022	May	Tux #3401	М	Gulf of Maine	USA	Entanglement
2022	May	#5012 (2020 Calf of #1612)	М	off Georges Bank	USA	Vessel Strike
2022	June	Hyphen #2681	М	Gulf of Maine	USA	Entanglement
2022	July	Sebastian #4650	М	Gulf of St. Lawrence	Canada	Entanglement
2022	July	Burl #3579	М	Gulf of St. Lawrence	Canada	Entanglement
2022	December	Prickly Pear #4310	F	off St. Augustine, FL	USA	Entanglement
2022	December	#5192 (2021 Calf of #3520)	М	off Southern New England	USA	Entanglement
2023	January	Nimbus #3812*	М	off Jekyll Island, GA	USA	Entanglement
2023	January	Coral #4980	F	off Amelia Island, FL	USA	Unknown Injury
2023	February	#5290 (2022 Calf of #3220)	F	off Tybee Island, GA	USA	Vessel Strike
2023	March	Mogul #3845	М	off Southern New England	USA	Entanglement
2023	March	Nymph #4020	F	Cape Cod Bay, MA	USA	Vessel Strike

2023	March	#4080	F	off Southern New England	USA	Entanglement
2023	March	#4145	М	off Southern New England	USA	Entanglement
2023	March	Rill #4446	М	off Southern New England	USA	Unknown Injury
2023	March	Wall-E#5104 (2021 Calf of #3904)	М	Cape Cod Bay, MA	USA	Entanglement
2023	June	Echo #2642**	F	Gulf of St. Lawrence	Canada	Entanglement
2023	June	#5257 (2022 Calf of #3157)	М	Gulf of St Lawrence	Canada	Entanglement
2023	June	#5280 (2022 Calf of #4180)	F	Gulf of St. Lawrence	Canada	Entanglement
2023	July	Martini #4042***	М	Gulf of St. Lawrence	Canada	Entanglement
2023	July	#5046 (2020 Calf of #3546)	М	Gulf of St Lawrence	Canada	Unknown Injury
2023	July	Boomerang #2503	F	Gulf of St. Lawrence	Canada	Entanglement
2023	September	#5253 (2022 Calf of #2753****)	М	Gulf of St. Lawrence	Canada	Entanglement
2024	February	Atoll #4714	F	Cape Cod Bay, MA	USA	Entanglement
2024	April	Kilo #4143	М	off Block Island, RI	USA	Entanglement
2024	May	#4991	F	Gulf of St. Lawrence	Canada	Entanglement
2024	May	#4130	М	off New York	USA	Vessel Strike
2024	June	Unk	U	Gulf of St. Lawrence	Canada	Entanglement
2024	July	#4050	F	off New York	USA	Vessel Strike
2024	September	Chiminea #4040*****	F	Gulf of St Lawrence	Canada	Entanglement

*This whale was previously documented with a less severe morbidity injury of unknown cause in July 2019 off Miscou Island, New Brunswick, Canada.

**This whale was previously documented with a less severe entanglement morbidity injury in July 2017 in the Gulf of St. Lawrence, Canada.

***This whale was previously documented with a less severe entanglement morbidity injury in May 2022 in Massachusetts Bay, USA.

****This whale was previously documented with a less severe entanglement morbidity injury in August 2022 in Gulf of St. Lawrence, Canada.

*****This whale was previously documented with a less severe morbidity injury of unknown cause in 2023 in Gulf of St. Lawrence, Canada.

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migrate across national boundaries often carry their illnesses, injuries, or exposures to toxins with them. For mortality, serious injury, and morbidity determinations in these species, transboundary collaboration is critical in determining the causes of injury, illness, and mortality for each animal.

North Atlantic Right Whales with Multiple Qualifying Injuries

Note: The animals listed below are already counted in the UME tally and included in the tables above based on the injury from the year in BOLD, which corresponds with the most severe category for their injury/illness (e.g., death, serious injury or morbidity).

The table highlights those whales that were confirmed to have experienced more than one injury since the UME began in 2017 that met the standards for inclusion in the UME as a morbidity, serious injury, or mortality.

NARW ID	Sex	Year	Month	Dead/SI/ Morbidity	COD/SI/Morbidity Category	Years/Months Between Injuries	
Shalagh #4510	Female	2017	July	SI	Entanglement	6 years 10	
Shelagh #4510	remaie	2024	May	SI	Entanglement	months	
Cottontail #3920	Male	2020	October	SI	Entanglement	5 months	
Collonial #3920	Male	2021	February	Dead	Entanglement	5 monuns	
Nimbus #3812	Male	2019	July	Morbidity	Unknown Injury	3 years 7	
NITIDUS #3012	Male	2023	January	Morbidity	Entanglement	months	
Echo #2642	Female	2017	July	Morbidity	Entanglement	5 years 11	
ECH0 #2042	remale	2023	June	Morbidity	Entanglement	months	
Martini #4042	Male	2022	May	Morbidity	Entanglement	10 months	
Martin #4042	Male	2023	July	Morbidity	Entanglement		
#5253 (2022 Calf	Male	2022	August	Morbidity	Entanglement	11 months	
of #2753)	Male	2023	September	Morbidity	Entanglement		
#5120 (2021 Calf	Female	2022	August	SI	Entanglement	1 year 5	
of #3720)	remale	2024	January	Dead	Entanglement	months	
2024Calfof#1612	Unknown	2024	January	SI	Vessel Strike	2 months	
2024Gall01#1012	UIKIIUWII	2024	March	Dead	Vessel Strike	2 monuns	
Dropcloth #1271	#1271 Male		July	Morbidity	Entanglement	5 voore	
Diopciotii #1271	Male	2024	July	SI	Entanglement	5 years	
Neptune #3301	Male	2019	September	Morbidity	Entanglement	4 years 11	
	IVIAIC	2024	August	SI	Entanglement	months	
Chiminea #4040	Female	2023	July	Morbidity	Unknown Injury	10 months	
	i cinale	2024	September	Morbidity	Entanglement		