What is an Unusual Mortality Event?

The MMPA defines a Unusual Mortality Event as “a stranding that is unexpected; involves a significant die-off of any marine mammal population; and demands immediate response.” Investigating UMEs is crucial to understanding the health of marine mammal populations, ocean health, and larger environmental issues.

North Atlantic right whales are an endangered species and are in crisis. The species is approaching extinction with fewer than 350 individuals and fewer than 70 reproductively active females remaining.

North Atlantic right whales almost became extinct after centuries of exploitation from commercial whaling. The species slowly increased to almost 500 individuals in 2010 due to protections from the Marine Mammal Protection Act (MMPA) of 1972 and the Endangered Species Act (ESA) of 1973.

Sadly, the North Atlantic right whale population started declining again and most severely in 2017 when 17 mortalities were documented in the United States and Canada, prompting NOAA Fisheries to declare an Unusual Mortality Event (UME) for the species. The ongoing UME tracks and investigates dead and seriously injured or sick individuals. Since 2017, at least 114 whales have been documented in the UME: 36 dead, 33 seriously injured, and 45 morbidity (sublethally injured or ill) cases.

The primary causes of the UME are entanglements in fishing gear and vessel strikes in both U.S. and Canadian waters, which are long-standing threats to the recovery of the species. Several cases include adult females or calves, which are particularly concerning. The 114 UME cases are a minimum because research suggests a majority of right whale deaths and injuries are undetected.

ENDANGERED NORTH ATLANTIC RIGHT WHALE

Fewer than 350* Individuals

114 DOCUMENTED DEAD, SERIOUS, or SUBLETHAL INJURIES/ILLNESS**
UNUSUAL MORTALITY EVENT
2017 - Present

36 DEAD
13 Unknown causes
12 Vessel strikes
9 Entanglements
2 Perinatal deaths
33 SERIOUS INJURIES
30 Entanglements
2 Vessel strikes
1 Dependent calf
45 SUBLETHAL INJURIES/ILLNESS
36 Entanglements
5 Poor body condition
2 Injuries of unknown cause
2 Vessel strikes

Calves born annually

*NOAA Fisheries data; 2022 each documented event indicates fewer than 10 individuals in the population. (May, 2022); **NOAA Fisheries data; release date 10/1/2022.

The abundance graph is based onFalse et al., 2017 and NOAA Fisheries data.

All photos taken under MMPA Permit No.18786
The Unusual Mortality Event Program

The UME Program was established by Congress under the MMPA to investigate die-offs of marine mammals. The Working Group on Marine Mammal UMEs is composed of marine mammal health experts who determine when a morbidity or mortality event is “unusual.” NOAA Fisheries reviews the Working Group’s recommendation and decides whether to declare a UME for species under our jurisdiction (whales, dolphins, seals, and sea lions).

Management Actions To Reduce Threats Causing the North Atlantic Right Whale Unusual Mortality Event

NOAA Fisheries is responsible under the MMPA and ESA for protecting and recovering right whales. The agency implements regulatory and non-regulatory measures with partners to reduce the threat of entanglements and vessel strikes and collaborates with Canada since right whales are a transboundary species.

FOR VESSEL STRIKES
- Requiring vessels to slow down in specific areas during designated times in Seasonal Management Areas
- Requesting voluntary speed reductions in Dynamic Management Areas and Right Whale Slow Zones
- Modifying international shipping lanes
- Developing right whale alert systems and mandatory vessel reporting systems
- Enhancing emergency response for injured whales
- Working with stakeholders to develop mitigation measures

FOR ENTANGLEMENTS
- Implementing seasonal closures and restricted areas for fixed gear commercial fisheries in areas whales aggregate
- Regulating maximum breaking strength for buoy lines
- Requiring sinking line between traps/pots on the seafloor
- Mandating gear marking to understand where and how whales become entangled
- Requiring weak links in fixed gear fisheries to help whales break free of lines and nets
- Enhancing emergency response for entangled whales
- Working with stakeholders to develop mitigation measures

OTHER ACTIVITIES TO PROMOTE RECOVERY
- The Species in the Spotlight 5-year Action Plan (2021–2025) outlines additional priority actions to address the most urgent threats

You can donate to the Marine Mammal Unusual Mortality Event Fund, which supports response and investigation efforts for UMEs via Pay.gov