

HOW CLIMATE CHANGE PUTS WHALES AT RISK

Over the past two years, hundreds of gray whales have washed ashore along North America's west coast. Researchers are learning that the answer to the question of why these whales are dying is complex, but likely involves warming ocean waters and melting Arctic sea ice brought on by climate change. So far, the evidence is circumstantial, and scientists are still seeking more-definitive data about what's killing the marine giants.

Malnourished whales are probably not as good at fending off orca attacks, toxins, and maladies that make them more vulnerable to death.

Having less ice opens more-northern territories for whales to feed. Reduced ice also leads to an increase in commercial shipping along the Northern Sea Route, raising chances for ships to collide with whales.

The whales may ingest toxins, such as the neurotoxin domoic acid, from the sediment as they filter feed, which could be damaging to animals that are unhealthy as a result of warming waters.

Without sea ice to collect algae, which would normally fall to the seafloor when the ice melts seasonally, shrimp-like crustaceans called amphipods that use the algae as a source of carbon become less nutritious food for gray whales, affecting mammals' ability to pack on blubber for the winter.

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