

Dolphin virus outbreak in Atlantic is deadliest ever

November 8 2013, by Kerry Sheridan



A mother and juvenile bottlenose dolphin.

The deadliest known outbreak of a measles-like virus in bottlenose dolphins has killed a record number of the animals along the US Atlantic coast since July, officials said Friday.

A total of 753 bottlenose dolphins have washed up from New York to Florida from July 1 until November 3, the National Oceanic and Atmospheric Administration said.

That is more than 10 times the number of dolphins that would typically turn up dead along East Coast beaches, said Teri Rowles, program coordinator of the NOAA Fisheries Marine Mammal Health and Stranding Response Program.

"Historic averages for this same time frame, same geographic area is only 74, so you get an idea of the scope," she told reporters.

The death toll is also higher than the more than 740 strandings in the last major Atlantic morbillivirus outbreak in 1987-1988.

And they have come in a much shorter time period, leading officials to anticipate this event could get much worse.

"It is expected that the confirmed mortalities will be higher," said Rowles.

"If this plays out similar to the '87-88 die-off, we are less than halfway through that time frame."

The cause of death is morbillivirus, a form of marine mammal measles that is similar to canine distemper and can cause pneumonia, suppressed immune function and brain infections that are usually fatal.

There is no evidence that cetacean morbillivirus can cause disease in people.

However, sick dolphins can also have bacterial or fungal infections that do pose risks to people, so beach-combers are advised not to approach

stranded animals but rather to call a local stranding network for help.

The virus spreads among dolphins in close contact.

A handful of washed up humpback whales and pygmy sperm whales have also tested positive for morbillivirus, but scientists have not been able to confirm that morbillivirus was the cause of those deaths since the animals were too decomposed by the time tests could be done.

Rowles said efforts are underway to try and determine if the virus might have been introduced into wild bottlenose dolphins from another species, like humpback whales or pygmy sperm whales.

"There are still a lot of unanswered questions about that," she told reporters.

Among bottlenose dolphins, immunity to the virus has been decreasing, particularly in the younger animals as time has gone by since the last outbreak 25 years ago.

"So we know we had a susceptible population, but just being susceptible alone is not how the outbreaks go," she said.

"We are trying to understand where this virus came from and how it got into the population in which it is now circulating."

Recent tests on three other species that have been found stranded—spotted dolphins, harp seals and common dolphins—have all been negative for morbillivirus.

In the meantime, the process of dealing with all the dead carcasses has been "overwhelming," particularly for local recovery teams, said Rowles.

The Virginia Aquarium alone has had to pick up and do necropsies on 333 animals in just a few months' time, said Ann Pabst, co-director of the University of North Carolina Marine Mammal Stranding Program.

"You can imagine that it really does become an all-consuming sort of job," she said.

"They have done heroically well in keeping up."

Five percent of the dolphins have been found alive on the beaches, but died soon after, NOAA said. The virus has appeared to infect dolphins of all ages, from young to old.

But since the number of dolphins washing up on shore may not represent all of the creatures that are dying, it is difficult to estimate what proportion of the population is sick.

And without a way to vaccinate the wild population, there is little that officials can do but collect the carcasses and continue to study them.

"Currently there is nothing that can be done to prevent the infection from spreading or to prevent animals that get infected from having severe clinical disease," said Rowles.

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