

## Terrible toll of the BP oil spill: Fish with open sores and shrimp with no eyes found in Gulf of Mexico two years after disaster

By [Daily Mail Reporter](#)

**PUBLISHED:** 17:08 EST, 19 April 2012 | **UPDATED:** 01:07 EST, 20 April 2012

Open sores. Parasitic infections. Chewed-up-looking fins. Gashes. Mysterious black streaks.

Two years after the drilling-rig explosion that touched off the biggest offshore oil spill in U.S. history, scientists are beginning to suspect that fish in the Gulf of Mexico are suffering the effects of the petroleum.

The evidence is nowhere near conclusive. But if those suspicions prove correct, it could mean that the environmental damage to the Gulf from the BP disaster is still unfolding and the picture isn't as rosy as it might have seemed just a year ago.



© AP Photo/Courtesy Donald Waters

**Open wounds: A fish caught off the Gulf of Mexico is among a growing number with**

**unusual lesions and infections, two years after the worst offshore spill in U.S. history**



© AP Photo/Courtesy Donald Waters

**Effects: In addition to fish, ones here seen with black wounds, damage to deep-water coral, seaweed beds, dolphins, mangroves and other species of plants and animals are being seen**



**Deformed:** These shrimp with no eyes were part of a huge haul of blind crustaceans found in the Gulf

And the damage may extend well beyond fish. In the past year, research has emerged showing deep-water coral, seaweed beds, dolphins, mangroves and other species of plants and animals are suffering.

'There is lots of circumstantial evidence that something is still awry,' said Christopher D'Elia, dean of Louisiana State University's School of the Coast and Environment. 'On the whole, it is not as much environmental damage as originally projected. Doesn't mean there is none.'

Reports of strange things with fish began emerging when fishermen returned to the Gulf weeks after BP's gushing oil well was capped during the summer of 2010. They started catching grouper and red snapper with large open sores and strange black streaks, lesions they said they had never seen. They promptly blamed the spill.

The illnesses are not believed to pose any health threat to humans. But the problems could be devastating to some prized types of fish and to the people who make their living catching them.



**Wounded catch: Weeks after fishermen returned to the Gulf for work following the spill, they began catching grouper and red snapper with large open sores and strange black streaks**

There's no saying for sure what's causing the diseases in what is still a relatively small percentage of the fish. The Gulf is assaulted with all kinds of contaminants every day. Moreover, scientists have no baseline data on sick fish in the Gulf from before the spill. The first comprehensive research may be years from publication.

## RECENT FINDINGS

- Fish caught 15 months after the oil well blew were found with oil in their bile. Bile tells what fish are eating
- Last summer 3% of fish caught had gashes, ulcers and parasites symptomatic of environmental contamination
  - numbers rose closer to well
- Less seaweed and crabs, lobsters and other forms of life found
- Dolphins found anemic, showing signs of liver and lung disease
- Community of deep-sea coral dying near BP well

Still, it's clear to fishermen and researchers alike that something's amiss.

— A recent batch of test results revealed the presence of oil in the bile extracted from fish caught in August 2011, nearly 15 months after the well blew out on April 20, 2010, in a disaster that killed 11 men.

'Bile tells you what a fish's last meal was,' said Steve Murawski, a marine biologist with the University of South

Florida and former chief science adviser for the National Marine Fisheries Service. 'There was as late as August of last year an oil source out there that some of those animals were consuming.'

Bile in red snapper, yellow-edge grouper and a few other species contained on average 125 parts per million of naphthalene, a compound in crude oil, Murawski said. Scientists expect to find almost none of the substance in fish captured in the open ocean.

— Last summer, a federally funded team of scientists conducted what experts say is the most extensive study yet of sick fish in shallow and deep Gulf waters. Over seven cruises in July and August, the scientists caught about 4,000 fish, from Florida's Dry Tortugas to Louisiana.

About 3 percent of the fish had gashes, ulcers and parasites symptomatic of environmental contamination, according to Murawski, the lead researcher.

The number of sick fish rose as scientists moved west away from the relatively clean waters of Florida, and also as they pushed into deeper waters off Alabama, Mississippi and especially Louisiana, near where the Deepwater Horizon rig sank.



**Numbers:** Though more fish than usual have been caught with the physical irregularities, it's still a relatively small percentage and the Gulf is assaulted with all kinds of contaminants every day requiring more study

About 10 percent of mud-dwelling tile fish caught in the DeSoto Canyon, to the northeast of the well, showed signs of sickness.

'The closer to the oil rig, the higher the frequency was' of sick fish, Murawski said.

Past studies off the Atlantic Seaboard found about 1 percent of fish suffering from diseases, Murawski said. But he said that figure cannot really be used for comparisons with the Gulf, whose warmer waters serve as an incubator for bacteria and parasites that can cause lesions and other illnesses.

— Laboratory work over the past winter on the USF samples indicates the immune systems of the fish were impaired by an unknown environmental stress or contamination. Other researchers say they have come to similar conclusions.



**Marks: Black streaks like the ones shown are also among the irregularities that have shown on about 3 per cent of the fish caught, with that amount increasing closer to the well**

'Some of the things I've seen over the past year or so I've never seen before,' said Will Patterson, a marine biologist at the University of South Alabama and at the Dauphin Island Sea Lab. 'Things like fin rot, large open sores on fish, those were some of the more disturbing types of things we saw. Different changes in pigment, red snapper with large black streaks on them.'

Teasing out what might have been caused by the spill and what is normal will be tricky, and that's the challenge scientists now face. Deformities, diseases and sudden shifts in fish numbers are regular occurrences in nature.

For example, scientists are not sure what to make of reports from fishermen of eyeless or otherwise deformed shrimp and crabs.

'I've heard everything but shrimp with two heads,' said Jerald Horst, a marine biologist retired from LSU AgCenter who writes books about the Gulf. 'I listen respectfully. Reports can be useful but are not proof in themselves of cause and effect.'



**Gashes: A fish caught in the Gulf shows a clear gash which was found this way when pulled from the water. Fish like the one shown are instructed to be thrown back while not believed a danger to humans**

Even if oil were pinpointed as the cause, it could be difficult to definitively tie the problem to the BP spill. The Gulf is strewn with wells, pipelines, natural oil leaks from the seafloor, and pollution from passing ships. And muddy, contaminant-laden water flows constantly into the Gulf from the Mississippi River.

Still, the more scientists look — thanks to millions of dollars in research money, much of it coming from a fund set up by BP for independent research — the more they're finding that may be off-kilter.

For example, last year scientists with the University of Louisiana at Lafayette took cruises in search of crabs, lobsters and seaweed they had been studying in the waters not far from the BP well. They found a surprising lack of diversity.

There saw less seaweed and fewer crabs, lobsters and other forms of life. Also, crustaceans they pulled up had lesions, lost appendages and black gunk on their gills, said Darryl Felder, a biologist at ULL. He said the black coating may be associated with the large amounts of drilling mud used to try to plug the leaking well.



**Food: Fish caught 15 months after the oil well blew were found with oil in their bile which tells scientists what their last meal was. A fish with unusual black markings shown**

In Barataria Bay, which was hit hard by the spill, scientists say they found dolphins that were anemic and showing signs of liver and lung disease. Those problems have not been linked to the spill. But in the same bay, scientists say they have linked oil contamination to genetic changes in bait fish known as killifish.

Near the BP well, scientists have found a dying community of deep-sea coral. The scientists recently published findings linking its demise to oil that was chemically fingerprinted as having come from the BP well.

Last year, the National Oceanic and Atmospheric Administration advised fishermen to throw suspicious-looking fish back, and fishermen say they have been doing that. At the same time, the Food and Drug Administration and state agencies say they have tested Gulf seafood extensively and found no problems, and researchers agree there is little cause for concern.



**Safety:** The Food and Drug Administration with state agencies say they have tested Gulf seafood extensively and found no problems but the increasing reports of wounded fish caught are still spooking some

'It's not a people issue, and people should not be concerned about fish entering the market,' Murawski said.

For the second year, fishermen like Wayne Werner, who catches red snapper commercially, are calling in with reports of lesions. He and others said they want to get to the bottom of the problem, which is forcing them to take longer trips to fishing spots outside the spill zone and making them fear for their livelihoods.

'Every time we talked about bad fish, everybody kind of went nuts on us. Just like, 'You're hearsaying,' you know? And we're saying, 'Well, they're there,' the Louisiana boat captain said this week. 'They're still there. Now that the water is getting warm again, we're starting to see more and more again.'

## MOST READ NEWS

- [Previous](#)
- [1](#)
- [2](#)
- [3](#)
- [Next](#)