Billions of pieces of plastic on coral reefs send disease soaring, research reveals

A major new study estimates 11bn pieces of plastic contaminate vital reefs and result in infections: 'It's like getting gangrene,' scientists warn

Damian Carrington Environment editor

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DA QUI >>>> Billions of pieces of plastic pollution are snagged on coral reefs, sending disease rates soaring, new research has revealed. The discovery compounds the damage being done to a vital habitat that already faces an existential threat from the warming caused by climate change.

Scientists examined 125,000 corals across the Asia-Pacific region, home to half the world's reefs, and found 89% of those fouled by plastic were suffering disease. On plastic-free reefs, only 4% of the corals were diseased.

The work is highly significant because it is the first to examine the impact of plastic on disease in any marine organism and also the first to produce a large-scale estimate of how much plastic pollutes the sea floor. Coral reefs in the region are contaminated with 11bn pieces of plastic, the research indicates.

At least 8 million tonnes of plastic are dumped in the ocean every year and it now pollutes even the remotest corners. Microplastics, formed when plastics are broken up, can be mistaken for food by sea creatures and early studies have shown this causes harm.

The scientists who conducted the new study did not set out to research plastic but were confronted by it across the regions they surveyed. The correlation between plastic pollution and high rates of disease was very striking and the researchers think sharp plastic fragments cut the coral organisms, while plastic fabrics smother them and block out light and oxygen.

"Corals are animals just like me and you – they become wounded and then infected," said Joleah Lamb, at Cornell University in the US, who led the new research, <u>published in the journal Science</u>. "Plastics are ideal vessels for microorganisms, with pits and pores, so it's like cutting yourself with a really dirty knife."

During dives Lamb found objects from plastic chairs to baby nappies to a Nike-branded quick-dry towel: "I saw a big white Nike swoosh, right there where the disease was and thought, 'oh gosh, this is not great'."

She said that once a coral is infected, disease usually spreads across the colony: "It's like getting gangrene on your toe and watching it eat your body. There's not much you can do to stop it. If a piece of plastic happens to entangle on a coral it has a pretty bad chance of survival."

[282 words]

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