

# When people know how COVID-19 probably started, they are more likely to support wildlife conservation

*While many scientists think COVID-19 jumped from animals to humans, which can be more likely to happen as we deplete natural environments, the idea that it came from a biosecurity lab in Wuhan persists. **Ganga Shreedhar** and **Susana Mourato (LSE)** showed people different articles about the origin of the virus and found that they were more likely to support wildlife conservation policies if the link with human actions was made clear. Telling them about the lab theory reduced that support, even when articles contained information about animal to human transmission.*

One of the greatest mysteries still surrounding the COVID-19 pandemic is where the coronavirus came from. The [uncertainty](#) about its origin is evident from the various and sometimes conflicting narratives circulating online. Did the virus come from [wild animals](#) (also known as [zoonotic](#) spillover, similar to swine flu and Ebola) – an escalating risk, since the anthropogenic depletion of wild nature [increases human contact with animal pathogens](#)? Or did it come from a [biosecurity lab](#)? Public understandings of the cause of the outbreak can affect support for different COVID-19 policies, and is important for choosing what we should do to contain it, and to mitigate the risk of future pandemics.



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To address these questions, we ran an [online experiment](#) with over a thousand UK residents who were randomly allocated to one of four groups (three treatment groups and one control group) and asked to read a different news story. Each story was adapted from articles in mainstream media outlets, and presented a different likely cause of the COVID-19 outbreak.

In the three treatment groups, people read either an article about animal to human transmission in Wuhan (Animal Cause); an article about animal to human transmission linked to the human destruction of nature (Animal and Human Cause); or an article that mentioned animal to human transmission but also included the possibility of the virus coming from a biosecurity lab in Wuhan (Animal, Human or Lab Cause; Figure 1). In the control group, people read a neutral article unrelated to the coronavirus' origin. People were then asked about a number of pro-wildlife conservation outcomes: donations to nature conservation, stated intentions to undertake pro-conservation behaviours, and stated support for policies that are pro-wildlife conservation.

**Figure 1: Sample story with three causal explanations for COVID-19**

## Where did the coronavirus come from?



Photograph: WCS

One of the great mysteries of the Covid-19 pandemic is where the new coronavirus came from. Finding the coronavirus source is important for preventing further reinfections and future pandemics.

US President **Donald Trump** suggested the virus came from **laboratories in Wuhan**, which the American intelligence is investigating. There is no evidence for this claim currently.

Lab ca

Scientists believe that the **coronavirus may have come from wild animals**, like bats, but we don't know how it got from bats to people.

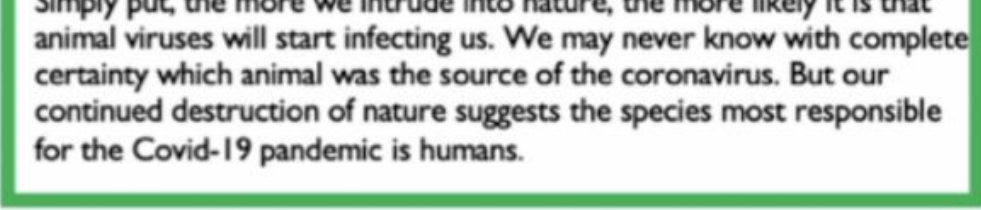
It may have **jumped from animals to humans in a market in Wuhan**. Apart from fish and meat, the market also traded wild animals like wolf pups, salamanders and foxes. Different species were crowded together with humans, which may have increased the chances for animal viruses to spread to humans.

Animal c

In the past 50 years, an **increasing number of infectious diseases have jumped from animals to humans**. For example, Avian flu came from birds, Swine flu came from pigs, and Ebola came from bats.

**Our destruction of nature may be responsible for animal viruses spreading to humans**. Humans intrude into wild nature by poaching and trading wildlife, farming, logging, mining, and road building. Such intrusions are increasing due to the production and consumption of wild animal and plant products - like pets, bushmeat, leather, palm oil and cocoa - worldwide.

Human c



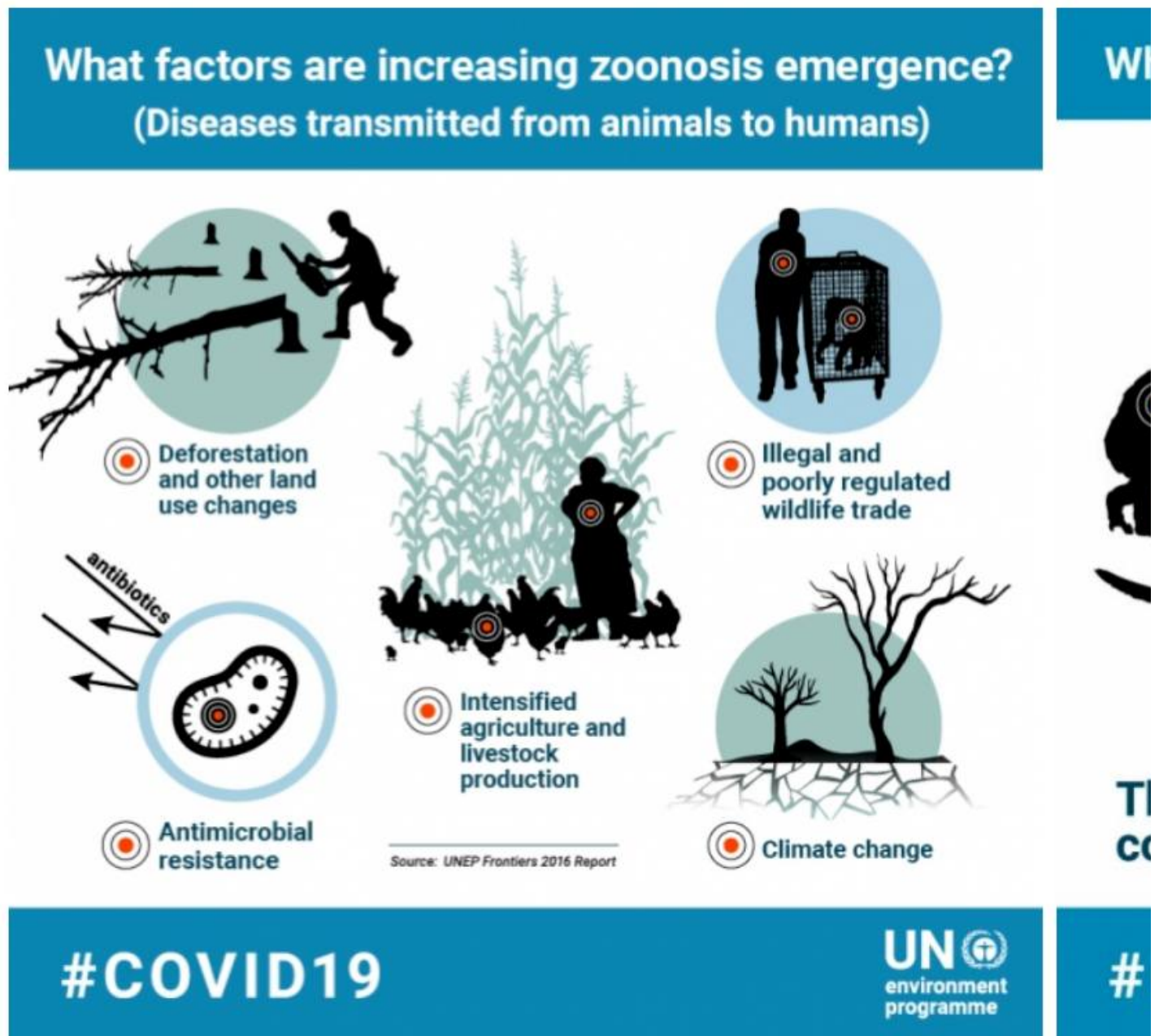
Simply put, the more we intrude into nature, the more likely it is that animal viruses will start infecting us. We may never know with complete certainty which animal was the source of the coronavirus. But our continued destruction of nature suggests the species most responsible for the Covid-19 pandemic is humans.

Note: The Animal Cause group omitted the Lab and Human cause section, and Animal and Human Cause omitted the Lab cause section.

We found that the Animal and Human Cause story elicited significantly greater support for conservation policies, especially for commercial wildlife trade bans, when compared to the control and other treatment groups. But adding the lab story (as in the Animal, Human or Lab Cause group) or removing the human-cause component (as in the Animal Cause group) attenuated this. When we explored possible mechanisms for this effect, we found that the Animal and Human Cause story was less familiar, elicited greater mental and emotional engagement, and induced stronger feelings that firms and governments are responsible for mitigating wildlife extinction. The Animal and Human Cause narrative also increased the likelihood of making a donation at the default amount of £10 and over.

These results suggest that stories causally linking the human destruction of nature to COVID-19 can increase support for wildlife conservation policies (i.e. an outrage effect). They demonstrate the importance of making people aware about how human behaviour towards nature affects human health (through the COVID-19 pandemic), and that human health depends on the health of the planet. Remarkably, the human cause story was also rated the least familiar in the study, although it has been the official position of many environmental and health [policymakers](#), animal welfare and conservation [groups](#), [writers](#) and [scientists](#). The first policy implication, therefore, is that there is a lot of scope to improve science communication on the interlinkages between human behaviour, human health and the environment in the context of COVID-19. For example, see the UN Environmental Programme's effort in Figure 2.

## Figure 2: Linking nature and human behaviour and health in the media



Source: [United Nations](#)

The second policy implication is that even brief exposure to counter-narratives, like the lab story, may dampen public support. This is similar to [other studies](#) showing that even brief exposure to climate conspiracy can [dampen](#) pro-climate intentions and attitudes. An important question facing policymakers, scientists and journalists is how best to communicate where the weight of the scientific evidence on the origin of COVID-19 lies – especially when evidence is still emerging.

It is too early to examine whether such stories and the pandemic itself will have a lasting effect on public preferences to protect wildlife and the environment more broadly. Yet the media helps to shape how citizens learn about the causes of the crisis, which in turn has implications for how governments respond to it.

*This post represents the views of the authors and not those of the COVID-19 blog, nor LSE.*