

Gene sleuths suggests wide virus spread from Boston meeting

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A meeting at a hotel in Boston last February may have ignited the spread of the pandemic virus to some 19,000 people in the area, a new study suggests.



Health authorities had previously linked the meeting to more than 90 cases among people at the meeting and their contacts. But researchers found that a specific mutation in the virus from people associated with the meeting also showed up in hundreds of other cases, which allowed them to estimate the broader extent of the spread.

It's "a pretty unsophisticated, back-of-the envelope calculation that we think gives us a sense of the scale," Bronwyn MacInnis of the Broad Institute of MIT and Harvard, senior author of the paper, said Tuesday.

The research <u>paper</u> has been posted online but has not yet undergone peer review. The 19,000 figure does not appear in the paper because it was an informal calculation, MacInnis said.

She and co-authors began their analysis by deciphering the genetic makeup of the new coronavirus that was recovered from people sampled mostly in the Boston area between January and May.

Twenty-eight of those infected people were already among the 90 who had been linked to the gathering, an international meeting of executives of Biogen, a biotech company based in Cambridge, Massachusetts, in February. All of their samples were found to contain a tiny but distinctive genetic variant, which the tresearchers then used as a marker to look for other cases related to the conference.

That distinctive marker showed up in 246 samples that were not previously linked to the meeting and were recovered from residents in four nearby counties. Researchers used that result to extrapolate to the 19,000 figure.

MacInnis said the marker did not make the virus particularly contagious or dangerous. But the conference occurred before people in in the Boston area were taking steps to minimize the spread of COVID-19, she



said.

In a statement to The Associated Press, Biogen said the meeting took place at a time "when general knowledge about the <u>coronavirus</u> was limited. We were adhering closely to the prevailing official guidelines. We never would have knowingly put anyone at risk."

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