Mathematical model indicates decline in current novel coronavirus infections in China

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A mathematical model set up by an ad-hoc group of scientists indicates the number of currently infected novel coronavirus cases in China are on the decline as of February 12.

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Dr Yi Zou, who is based in the Department of Health and Environmental Sciences at Xi'an Jiaotong-Liverpool University said, "The figures created from the model February 13-15 from previous-day data show that the daily number of cured cases and deceased cases is now higher than the newly infected, leading to a decrease in the number currently infected. This pattern of decline would be hopeful, since each day there are fewer people who infect others, and the burden of taking care of sick people should decline. However, if factors that affect the trend change or if the data on current cases is underreported, the model's indications will not be accurate."

Dr Zou is one of four researchers from universities in China who publish figures derived from the model and other related information on a website they set up for use by scientists, journalists and other researchers.

The website includes open access to data from across China on the novel coronavirus outbreak and daily statistical modeling, both for the country as a whole and for its individual provinces.

"The data is both as current as possible and from authoritative sources. All data and information are automatically captured every 30 minutes through a background program to ensure timeliness. The data and information sources include government websites at all levels and media such as People's Daily and China Central Television to ensure that information is open, transparent and traceable", Dr Zou says.
In addition to Dr Zou, other volunteers responsible for development of the website include Dr Peng Zhao and Dr Lei Han, also of XJTLU’s Department of Health and Environmental Sciences, and Dr Xiaoxiang Wang from Southern University of Science and Technology.