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Quarantine on cruise ship resulted in more COVID-19 patients, study finds

Date: February 28, 2020

Source: Umea University

Summary: The cruise ship Diamond Princess was quarantined for over two weeks resulting in more coronavirus infected passengers than if they would have disembarked immediately -- rather the opposite to what was intended, according to a new study.

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FULL STORY

The cruise ship Diamond Princess was quarantined for over two weeks resulting in more coronavirus infected passengers than if they would have disembarked immediately. Rather the opposite to what was intended. This according to a study conducted at Umeå University in Sweden.

"The infection rate onboard the vessel was about four times higher than what can be seen on land in the worst infected areas of China. A probable cause is how close people stay to one another onboard a vessel," says Joacim Rocklöv, Professor of epidemiology at Umeå University and principal author of the article.

After a person travelling with the cruise ship Diamond Princess disembarked in Hong Kong and was tested positive for the coronavirus, Japanese authorities decided to disallow the 3,700 passengers onboard to leave the ship when it reached Yokohama. The ship was hence put in quarantine until 19 February. Passengers who showed signs of illness were, as far as possible, separated from other passengers onboard. When the quarantine in Yokohama in the end was removed and passengers could finally disembark, a total of 619 passengers had been infected by the coronavirus.

"If the ship had been immediately evacuated upon arrival in Yokohama, and the passengers who tested positive for the coronavirus and potential others in the risk zone had been taken care of, the scenario would have looked quite different. Our calculations show that only around 70 passengers would have been infected. A number that greatly falls short of the over 600 passengers the quarantine resulted in. The precautionary measure of putting the entire ship under quarantine was understandable, but due to the high risk of transmission on the ship, the decision is now questionable," says Joacim Rocklöv.

At the same time, the study also shows that if the precautionary measures of isolating potential carriers had not been carried out onboard, another 2,300 people would have been infected.

Story Source:

Materials provided by **Umea University**. Original written by Ola Nilsson. *Note: Content may be edited for style and length.*

Journal Reference:

1. A Wilder-Smith, H Sjödin, J Rocklöv. **COVID-19 outbreak on the Diamond Princess cruise ship: estimating the epidemic potential and effectiveness of public health countermeasures.** *Journal of Travel Medicine*, 2020; DOI: 10.1093/jtm/taaa030
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Umea University. "Quarantine on cruise ship resulted in more COVID-19 patients, study finds." ScienceDaily. ScienceDaily, 28 February 2020. <www.sciencedaily.com/releases/2020/02/200228170331.htm>.

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