

# Immunity to the pandemic virus A (H1N1): Norway is probably well-prepared for major new outbreaks

August 24 2010

---

By autumn 2009, almost half of the population of Norway had been vaccinated against the pandemic influenza A (H1N1) virus. Many had also been infected by the virus during the summer and autumn outbreaks. The majority of those who were vaccinated or were infected are expected to have developed immunity to the virus. A study of the Norwegian population's immune status to the pandemic virus in January 2010 was recently published in the journal *Eurosurveillance*.

For many years the Norwegian Institute of [Public Health](#) (NIPH) has monitored the population's immune status for [influenza](#) by studying antibodies in blood samples. The annual collection usually takes place in August but an extra collection was made in January 2010 in connection with the pandemic to see what effect vaccination and infection had had on the population's immunity. Samples taken in 2008 were also studied to see how many people already had some form of immunity before the pandemic occurred.

The study found that at the beginning of 2010 nearly 60 percent of the population had measurable immunity to the pandemic virus, with 45 per cent having a sufficient immunity to protect against the disease.

"This is a substantial increase because few had antibodies against the new virus prior to the pandemic" said Olav Hungnes, a researcher at the Department of Virology at the NIPH.

"Even though many acquired immunity through infection, we believe that vaccination may have been responsible for most of the increase. The population of Norway is particularly well prepared for major new outbreaks of [swine flu](#), compared with countries where fewer received the [vaccine](#). Even those who are not immune will benefit from the fact that the spread of infection would be slowed by others' immunity - we call this herd immunity," said Hungnes.

The proportion of young people who developed immunity is high, probably because both the rate of vaccination and the extent of infection were high.

It remains to be seen how well immunity remains over time and the NIPH will continue to monitor the population's immunity.

Provided by Norwegian Institute of Public Health

Citation: Immunity to the pandemic virus A (H1N1): Norway is probably well-prepared for major new outbreaks (2010, August 24) retrieved 26 April 2024 from <https://medicalxpress.com/news/2010-08-immunity-pandemic-virus-h1n1-norway.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--