

Population-level susceptibility, severity and spread of pandemic influenza: design of, and initial results from, a pre-pandemic and hibernating pandemic phase study using cross-sectional data from the Health Survey for England (HSE)

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Plain English summary

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Plain English summary

The next influenza pandemic will appear suddenly and with little warning. Pandemic influenza can be severe and cause many deaths, like the 1918 pandemic, or it can be relatively mild, like the 2009 swine flu pandemic. Governments need information on the severity of the pandemic and groups affected very early on so that they can plan their public health response and, in particular, decide how best to use national vaccine and antiviral supplies. Accurately measuring the frequency and severity of pandemic influenza, and the groups affected, requires large studies that ask people about their illness and test their blood for infection. Studies like this generally take months to set up, but in a pandemic we need results much more quickly. This study was designed to solve that problem by simply adding a few questions and an extra blood sample to a large national survey that already takes place throughout every year – the Health Survey for England.

We are currently setting up, testing and refining this system so that we are ready to run it again if another influenza pandemic occurs. We have finished the first stage of testing, in which we discovered that we need to change the way we ask people about their illnesses. We are using this information to improve the study and help make sure that, if a pandemic arises, we are collecting reliable and useful information that will help the government and health services respond to the pandemic.

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This report

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