NATURE | NEWS

Scientists call for 60-day suspension of mutant flu research

Delay will allow time for debate on regulating potentially dangerous research.

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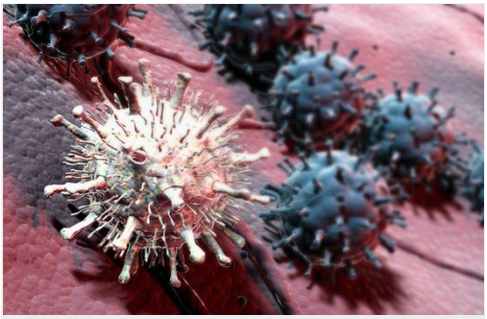
As controversy rages around the scientists who created mutant strains of the H5N1 avian influenza virus, leading flu researchers have called for a 60-day voluntary pause on such work. The call comes in a statement jointly published today in *Nature* (R. A. M. Fouchier *et al. Nature* **481,** 443; 2012) and *Science*.



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The avian flu virus could cause a pandemic if it mutates into a form that is more easily transmitted between humans.

On 20 December, the United States government — acting on advice from the US National Science Advisory Board for Biosecurity (NSABB) — asked both journals to publish only the main conclusions of two flu studies, but not to reveal details "that could enable replication of the experiments by those who would seek to do harm" (see 'Call to censor flu studies draws fire'). The journals and the authors have agreed to this redaction, on the condition that a mechanism is established to disseminate the information to legitimate flu researchers on a need-to-know basis.

The US government, the World Health Organization (WHO) and other bodies are now frantically trying to put together this mechanism, along with a framework for international oversight of such research. The signatories of today's statement, including the key authors behind the controversial research, say that the pause is intended to allow time for this discussion. "We realize that organizations and governments around the world need time to find the best solutions for opportunities and challenges that stem from the work," they write.

The scientists add that they intend to organize an international forum to debate the risks and benefits of the research. "We recognize that we and the rest of the scientific community need to clearly explain the benefits of this important research and the measures taken to minimize its possible risks," they write.

"Scientists need to have their voices heard in this debate," says Yoshihiro Kawaoka of the University of Wisconsin-Madison, lead investigator on the paper submitted to *Nature* and a signatory of today's statement. "We hope that by having a calm and reasoned discussion of the facts, scientists and biosecurity experts can reach a better understanding and find ways to enable the research to go forward while minimizing risks."

Bioterrorism is just one potential risk of such research. More worrying to some researchers is that if a mutant virus were to accidentally escape from the lab, it could cause a H5N1 pandemic. The authors of the statement say that they hope to "assure" the public that the viruses are in safe hands in secure containment facilities. Such research is currently classed as requiring biosafety level 3 (BSL-3) enhanced containment facilities, but many scientists argue that it should be done only in BSL-4 labs, which have the highest biosafety rating (see 'Fears grow over lab-bred flu').

"I am very much in favour of having a pause," says Anthony Fauci, director of the US National Institute of Allergy and Infectious Diseases (NIAID). He concedes that the length of the pause is not long, but that researchers were concerned about having an open-ended moratorium. "60 days as a start I think is reasonable, and after 60 days we will re-evaluate it," he says.

"The pause is welcome in the sense that hopefully it will relieve some of the immediate urgency in terms of trying to chart a course forward," agrees Michael Osterholm, who heads the University of Minnesota's Center for Infectious Disease Research and Policy in Minneapolis, and is a member of the NSABB.

But he thinks that the duration of the pause is too short. "The 60 days will likely not be adequate in terms of getting a truly workable international policy and applying that. I just don't think that's realistic," he says. Moreover, the statement makes no mention of any voluntary moratorium on the publication of such work. The NSABB is currently considering recommending one, but given the scale of the controversy over the papers and the moves to establish a data-sharing mechanism, a *de facto* moratorium may already exist.

The controversy is splitting the scientific and wider community into two camps: those who think that the research should never have been done, and those who feel that it is crucial. What's needed now is to find some middle ground, says Osterholm, for example by assessing what public-health benefits the research realistically offers in the near- and long-term. That should guide decisions as to the levels of acceptable risk, he says, so that the research can proceed “safely, and in a way that does not put the world at potential risk”.

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