The OSTP’s just released recommended policy guidance provides a potentially big escape hatch in deciding which “enhanced” potential pandemic pathogens (PPPs) should undergo departmental and agency review. Even the Fouchier and Kawaoka research that triggered the two-year “deliberative process” might escape review. The main problem lies in OSTP’s definition of PPPs.

The relevant OSTP definitions are:

“2.2. A potential pandemic pathogen (PPP) is one that satisfies both of the following:
   2.2.1. It is likely highly transmissible and likely capable of wide and uncontrollable spread in human populations, and
   2.2.2. It is likely highly virulent and likely to cause significant morbidity and/or mortality in humans.
2.3. An enhanced PPP is a PPP resulting from the enhancement of a pathogen’s transmissibility and/or virulence.”

The definition is problematic. Clause 2.2 requires the pathogen to be both highly transmissible and highly virulent to be considered a PPP. It seems to me that non-transmissible pathogens that “cause significant morbidity and/or mortality in humans” should be considered PPPs if they can be made “likely highly transmissible” in humans.

Furthermore, limiting the pre-enhancement starting pathogen to human pathogens seems to leave out highly pathogenic avian influenza (HPAI), such as native H5N1 influenza strains that cause 60% fatalities in the few poultry workers who become infected through direct physical contact with poultry. The native avian influenza viruses that I am aware of are only barely transmissible in humans, so they do not appear to fit the OSTP’s definition of a PPP, and therefore not subject to review.

Section 3, Policy Principles, further defines what was called “research of concern” by the NSABB.

“Agency review mechanisms pursuant to this recommended policy guidance should establish that a project involving the creation, transfer, or use of enhanced PPPs should satisfy the following principles, which are based on similar principles in the NSAB Recommendations...

3.2. The pathogen that is anticipated to be generated by the project must be reasonably judged to be a credible source of a potential future human pandemic...”

Taken alone, clause 3.2 would seem to include as projects subject to review the creation of matHPAI from viruses barely transmissible in humans. Unfortunately, the introductory sentence before clause 3.2 harkens back to the enhanced PPP definition in 2.2 and 2.3 above, leaving in place the escape hatch.

Here is what OSTP says about lifting the current moratorium:

“Adoption of these recommendations will satisfy the requirements for lifting the current moratorium on certain life sciences research that could enhance a pathogen’s virulence and/or transmissibility to produce a potential pandemic pathogen (an enhanced PPP)”

The statement above suggests that “adoption of these recommendations” will allow “lifting the current moratorium on certain research,” but I hope not all the research subject to the moratorium.
It is appropriate that OSTPs policy guidelines not focus on specific experiments by providing examples. We should get an answer soon on how these guidelines are interpreted when NIH and other agencies decide whether or not matHPAI research should be funded. Since NIH approved of and funded the research in the past, it may not have not changed its opinion and would resume funding.

Let’s hope the two years of argument over Fouchier’s and Kawaoka’s dangerous research will not be ignored. Simply lifting the NIH funding pause on them would ignore our arguments.

The language “lab-created PPPs” as used by many of us does not define PPPs as being restricted to humans, so would include the Fouchier or Kawaoka research as experiments of concern and subject to departmental and agency review.