



DUAL USE RESEARCH OF CONCERN (DURC) AND PATHOGENS WITH ENHANCED PANDEMIC POTENTIAL (PEPP)

DURC refers to research intended to provide benefits but that could be misused to cause great harm

DURC refers to a small but important subset of biological research that could generate biological materials, research methods, technologies, or published information that could be directly misapplied to pose significant threats to public health, agricultural products, the environment, or national security.

Pathogens with enhanced pandemic potential

The greatest concerns surround research that can be reasonably anticipated to create novel viral strains that have been engineered to be more transmissible or lethal. US government policy defines these pathogens as pathogens with enhanced pandemic potential (PEPP). They are in a special class of DURC policy (termed Category 2) that requires special governance action. This type of work has previously been called “gain of function,” but that term encompasses much other research that is not high risk. Therefore, the term PEPP is now used in USG policy to be more precise about governance needs.

The 2024 White House OSTP DURC and PEPP policy represents a strong step toward preventing high consequence accidents or deliberate misuse

In May 2024, OSTP released a federal oversight framework for conducting and managing life sciences research that could have dual use potential (the 2024 DURC policy). This represented a major step forward in mitigating risk from DURC. The policy represents over two years of dialogue between the government and leading organizations in science, national security, biosafety, civil society, and public policy, and replaced a patchwork of existing policies. The policy classifies research into Categories 1 and 2 based on risk levels, creates a framework that researchers can use to assess the potential risks from their research, and requires federal agencies to review proposals for potentially dangerous research before awarding funding. It also clearly delineates responsibilities between researchers, research institutions, and government agencies. Category 2 research requires high level federal agency review and ultimate sign-off by a senior political official.

Congress could strengthen the 2024 DURC policy by:

- Passing measures that would make the policy applicable to privately funded DURC and PEPP research, as well as US government-funded research currently covered
- Ensuring federal agencies have the resources and infrastructure to fully implement and enforce the policy
- Requiring transparent quarterly reporting by funding agencies to allow researchers to learn from oversight decisions and to provide public information to civil society, which should understand this research
- Mandating that NSC or OSTP review and approve all classified life science research proposals and programs quarterly