

# Category 1

Dual Use Research of Concern (DURC) is a term that captures two key concepts: “Dual Use Research” and “of Concern.”

According to the policy, DURC research is “research conducted for legitimate purposes that generates knowledge, information, technologies, or products, that can be utilized for benevolent or harmful purposes.”

The definition for DURC is “life sciences research that, based on current understanding, can be reasonably anticipated to provide knowledge, information, products, or technologies that could be misapplied to harm with no, or only minor, modification to pose a significant threat with potential consequences to public health and safety, crops and other plants, animals, the environment, materiel, or national security.”

## Experiments of Concern

1. Increase transmissibility of a pathogen within or between host species;
2. Increase the virulence of a pathogen or convey virulence to a non-pathogen;
3. Increase the toxicity of a known toxin or produce a novel toxin;
4. Increase the stability of a pathogen or toxin in the environment, or increase the ability to disseminate a pathogen or toxin;
5. Alter the host range or tropism of a pathogen or toxin;
6. Decrease the ability for a human or veterinary pathogen or toxin to be detected using standard diagnostic or analytical methods;
7. Increase resistance of a pathogen or toxin to clinical and/or veterinary prophylactic or therapeutic interventions;
8. Alter a human or veterinary pathogen or toxin to disrupt the effectiveness of preexisting immunity, via immunization or natural infection, against the pathogen or toxin; **or**
9. Enhance the susceptibility of a host population to a pathogen or toxin.