Dual-use research of concern (DURC)

describes research that is intended to provide a clear benefit, but which could easily be misapplied to do harm. It usually refers to work in the life sciences, but the principles are also applicable to other fields including engineering and information technology. It encompasses everything from information to specific products that have the potential to create negative consequences for health and safety, agriculture, the environment or national security.

What is dual use agents of concern?

DURC is defined as research involving certain categories of experimental effects with select agents or toxins that may be misapplied to create a **potential threat** to public health, safety, plants, animals, the environment or national security.

What is dual-use research of concern?

One example is research into viruses and other pathogens. Scientists often create modified versions of dangerous viruses in laboratories to study how they behave in humans and animals, and ultimately how to fight them. While this is a necessary step in biological research, the modified viruses also pose safety concerns and have the potential to cause great harm if not controlled correctly or used to intentionally infect people or animals.

Another example is pharmaceutical research and development. Scientists researching asthma have developed aerosol methods that help deliver drugs deeper into the lungs. While this research may hold great benefits for people with asthma and other respiratory issues, they could also be used to increase the damage of biological weapons such as anthrax.

Dual-use **items**: (including **software** and **technology**) are items which can be used for both civil and military purposes. The term also includes all goods which have non-explosive uses or assist in any way with the manufacture of nuclear weapons or other nuclear explosive devices.

Dual-use items, software and technology

Dual-use items include physical goods, software and technology and are set out in these broad categories:

Control categories	items
0	nuclear materials
1	materials, chemicals, micro-organisms and toxins
2	materials processing
3	electronics
4	computers
5	telecommunications and information security
6	sensors and lasers
7	navigation and avionics
8	marine
9	aerospace and propulsion

Each category is then divided again from A to E:

- A: systems equipment and components
- B: test, inspection and production equipment
- C: materials
- D: software
- E: technology

Dual-use research of concern (DURC) is **regulated** through guidelines and policies established by various organizations and government bodies