

The invisible threat

The Bush administration is convinced that Iraq has chemical weapons and the means to deliver them. Some of the weapons that Iraq has produced in the past and possible delivery systems:

Major chemical and biological weapons sites declared by Iraq

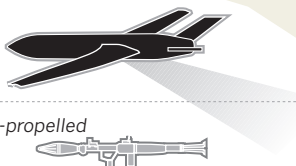
Chemical weapons facilities acknowledged by Iraq in the 1990s include production and deployment sites. Biological facilities include research, production, testing and deployment sites.

-  Chemical
-  Biological

Delivery systems:

Chemical and biological weapons can be spread by explosive devices or pressurized gas. Other means include the use of aircraft with spray tanks and ground vehicles with aerosol generators.

Spraying by unmanned drones



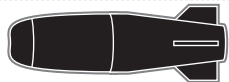
RPG-7 rocket-propelled grenades



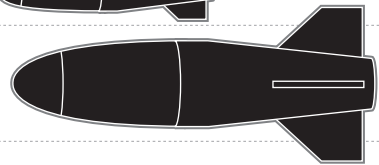
130-mm and 155-mm artillery shells



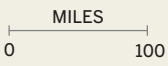
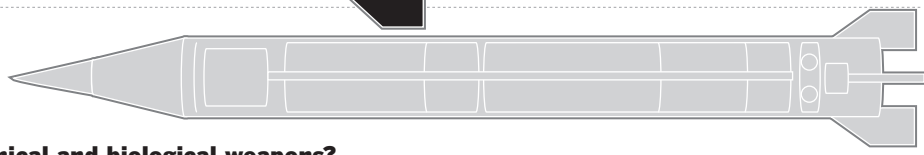
DB-2 chemical bomb



R-400 chemical bomb





Chemical warhead based on Al-Hussein missile with a range of 406 miles.



A missile's reach
Missiles loaded with chemical weapons could have a range of up to 406 miles, extending far beyond Iraq's borders.

What are chemical and biological weapons?

 Chemical:	Source	How they are dispersed	Defense
Mustard blister agents	Primarily man-made substances.	Spread as a liquid or by aerosol. May be loaded into rocket-propelled grenades, mortar shells, artillery shells, aerial bombs or missiles, or sprayed by aircraft.	Various real-time detectors provide warning of potential exposure to chemical agents, allowing soldiers time to don protective gear. Special clothing covers eyes, skin and respiratory system.
CS tear gas			
Nerve agents: sarin, Tabun, VX agent			
 Biological:	Source	How they are dispersed	Defense
Anthrax	Found in nature. Made by using bacteria or viruses as replicating agents or other materials produced by living organisms.	Spread as a liquid or by aerosol. The small particle size requires a high-energy generating system and weather conditions that keep the aerosol cloud near the ground. May be loaded into missiles or shells or put into food or water.	Existing detectors are less effective than those for chemical weapons. Identification requires time. Treatments are available for some toxins.
Botulinum			
Ricin			

Sources: "Textbook of Military Medicine," Office of the Surgeon General, John Pike, GlobalSecurity.org, "Weapons: An International Encyclopedia," CIS maps, "Iraq's Weapons of Mass Destruction: The Assessment of the British Government," Sept. 24, 2002