

**Decontamination Strategy and Technology Selection Tool for Decontamination of Facilities  
Contaminated with Biological or Chemical Agents**

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Successful decontamination of a complex facility may be achieved through one or more of several potential decontamination methods, based upon the environmental conditions, application requirements, and site-specific inputs. Remediation with each potential technology may involve different levels of cleaning and removal (and possibly off-site treatment) of potentially contaminated items or materials (source reduction), and additional management of items and materials (waste removal), all with associated costs and benefits.

The Decontamination Strategy and Technology Selection Tool (DeconST) provides a framework for considering decontamination options and facilitating the development of facility-specific remediation approaches following attack or contamination with *Bacillus anthracis* (B.a.) or a chemical agent such as the blister agent sulfur mustard (HD) or the nerve agent VX. The comparison includes for each decontamination technology the required operational conditions, source reduction, materials compatibility, waste management, and costs to the facility. The DeconST uses published experiment-based data on the decontamination technologies and has the flexibility to incorporate updates to those data as well as new decontamination strategies and technologies and new facility structural and nonstructural materials and contents.

The DeconST is intended to be used by a technical working group (TWG) functioning under a Unified Command (UC) to provide recommendations to the Incident Commander (IC) on decontamination technologies appropriate to a given building. The DeconST is not an expert system, meaning that it does not tell the IC/UC what technology to use, but rather it presents a series of options and recommendations, with color-coded estimates of likelihood of success, cost implications, and waste estimates. The DeconST outputs, including tables of waste composition, cost distribution charts, and other information that would justify recommendations, are provided as detailed reports suitable for inclusion in the records of the IC/UC.