Ensuring the health of the Soldiers and their families within the U.S. Department of Defense while meeting sustainable use of testing and training ranges is a critical goal in maintaining a ready force capable of meeting future security requirements. Large land areas are required for these purposes, many of which support valuable resources to local communities in terms of maintaining ecosystem services, preserving rare species, and providing for the general health of civilians and their families. Development of military-specific substances include those used in new weapon systems and platforms, medications for countermeasures, insect repellants, fire extinguishing agents, warfighter gear, propellants, and specialized coatings to ensure reliability. There are medical and non-medical toxicology requirements of the military – to ensure public health of the force, fight against unpredictable terrorist events, and provide new tools for winning conflicts in unconventional scenarios.

Together, there are 15 entities within the DoD that perform toxicology evaluation, research, testing or all three. There are seven that have laboratories that can collect toxicology data – each having different missions and areas of specialties. To enable the DoD to respond quickly to an unknowable, complex future, the Tri-Service Toxicology Consortium (TSTC) was established to help coordinate toxicology services where appropriate. The TSTC meets three times annually and has over 30 coordinated projects. Participation is voluntary and the TSTC serves as a technical organization to the greater DoD.