CHEMRAT
Chemical Hazard Estimation Method and Risk Assessment Tool

Concept Demonstration

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What is CHEMRAT?

A post attack risk assessment tool that will:

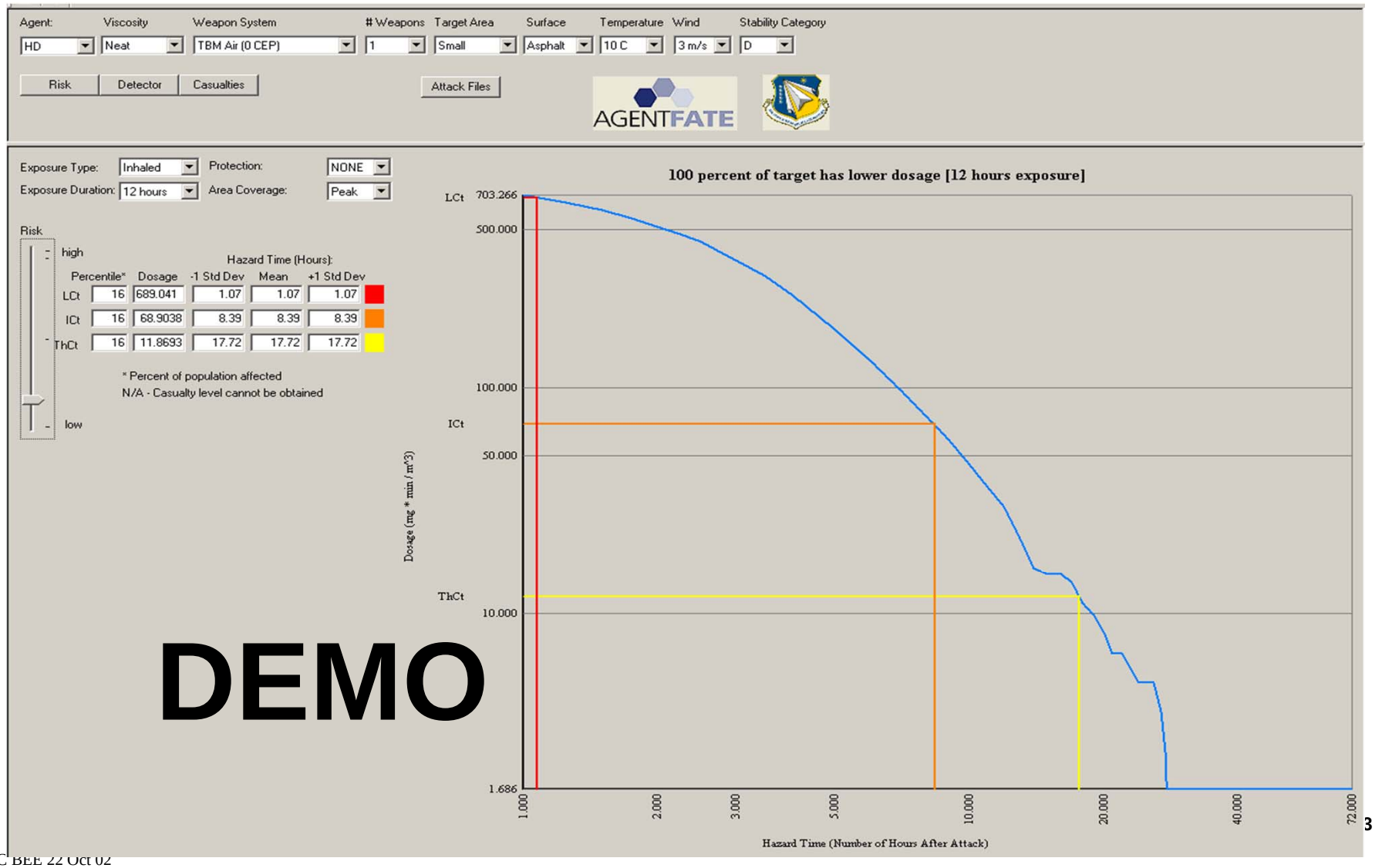
- Estimate the persistence of post attack vapor hazard
- Estimate the risk of receiving a hazardous exposure
- Estimate the duration of hazard for various risk levels
- Shows the relationship (sensitivity) between the input variables and output values
  - Is invertible - risk/exposure > persistence time, or Risk/persistence time > exposure, or Persistence time/exposure > risk
- CHEMRAT Data is built using VLSTRACK (3.1)
  - Accuracy of the persistence predictions is limited by VLSTRACK

Example : HD filled TBM attack, 1 missile

10C 3m/s on asphalt, small target

peak vapor coverage (worst case on the target)

12 hour inhalation exposure, no mask, 16th percentile individual



DEMO

CHEMRAT – Status

- Interim DoD Accreditation has been acquired
- Expanded database (agents,targets,weapons, surfaces) & functions planned
- Copies of can be acquired from
  - Joint Operational Effects Federate (JOEF) Program, Dr Jerry Hoffman 858 537 0125 (DSN 577)
  - Or AFRL/HEST, DSN 785-3161 or 3140