

**DEFENSE THREAT REDUCTION AGENCY**



*Making the World Safer*

***Nuclear Test Personnel Review (NTPR)  
Dose Reconstruction & Veterans  
Communication Activities***

Dr. Paul K. Blake

Veterans' Advisory Board on Dose Reconstruction

17 Aug 2005

1530-1600

# *Briefing Outline*

- Public Law 108-183
- Department of Defense –  
Department of Veterans  
Affairs Joint Report to  
Congress
- Workload
- Pending
- Projected briefing time: 25  
minutes



# *Public Law 108-183 - Overview*

- Enacted in December 2003, subsequent to reviews by General Accounting Office (GAO) and National Academy of Sciences (NAS)
- Required Secretaries of Defense and Veterans Affairs to:
  - Jointly conduct a review of the mission, procedures, and administration of the dose reconstruction program
  - Ensure on-going independent review and oversight, including the establishment of an advisory board



# *Public Law 108-183 – Joint Review*

- Determine whether additional actions are required to ensure that quality assurance and quality control mechanisms are adequate/sufficient
- Determine actions required to ensure that mechanisms for communication and interaction with veterans are adequate/sufficient, including mechanisms to permit veterans to review the assumptions utilized in their dose reconstructions

# *Public Law 108-183 – Joint Report to Congress*

- Convey results of the joint review
- Include plan of required actions
- Other recommendations for improvement of the mission, procedures, and administration of the dose reconstruction program, as jointly considered appropriate by the Secretaries of Defense and Veterans Affairs

# *Public Law 108-183 – Advisory Board*

- To provide review and oversight of the dose reconstruction program
- Composed of:
  - At least one expert in historical dose reconstruction of the type conducted under the dose reconstruction program
  - At least one expert in radiation health matters
  - At least one expert in risk communication matters
  - One representative each from DTRA and VA
  - At least three veterans, including at least one who is a member of an atomic veterans group

# *Public Law 108-183 – Advisory Board*

- Conduct periodic, random audits of dose reconstructions performed under the dose reconstruction program and decisions by VA on claims for service connection or radiogenic diseases
- Assist VA and DTRA in communicating to veterans information on the mission, procedures, and evidentiary requirements of the dose reconstruction program
- Carry out other activities with respect to the review and oversight of the dose reconstruction program as jointly specified by the Secretaries
- As a result of periodic audits, make recommendations as considered appropriate on modifications to the mission or procedures of the dose reconstruction program

# *DoD-VA Report To Congress - Overview*

- Submitted as required by Public Law 108-183 in June 2004
- Constitutes a review of missions, procedures, and administration pertaining to the NTPR Program.
- Presents 23 findings and summarizes DTRA and VA action plans
- These action plans are expected to overcome the deficiencies in the dose reconstruction and claims adjudication programs

The Honorable Christopher H. Smith  
Chairman  
Committee on Veterans Affairs  
U. S. House of Representatives  
Washington, DC 20515-6335

Dear Mr. Chairman:

Enclosed is the Radiation Dose Reconstruction Program of the Department of Defense (DoD) Report to Congress as required by Section 601(a)(3) of Public Law (PL) 108-183, and the Veterans Benefits Act of 2003, enacted December 16, 2003. This report represents a joint submission from DoD and the Department of Veterans Affairs (VA).

The report constitutes a review of the missions, procedures, and administration of both agencies pertaining to DoD's Radiation Dose Reconstruction program. The report summarizes the actions taken to date, identifies further actions, and describes future plans for completion. The emphasis areas for DoD and VA respectively are: the development of a comprehensive quality management program for the dose reconstruction process and the improvement of veteran communications on the claim decision process.

The Office of Management and Budget has reviewed and approved the release of the enclosed report.

The point of contact for this action is Mr. Bradley Flohr of the VA. He may be reached at (202) 273-7241.

  
Daniel L. Cooper

Under Secretary for Benefits



Dale Klein  
Assistant to the Secretary of Defense  
For Nuclear and Chemical and  
Biological Defense Programs

Enclosure:  
As stated

cc: The Honorable Lane Evans  
Rankine Member



# *DoD-VA Report To Congress – Summary*

- Findings 1-4: Inter-Agency Actions to Improve Claims Procedures
- Findings 5-14: DTRA Actions to Improve NTPR Program Procedures
- Findings 15-18: Inter-Agency Actions to Improve Communications
- Findings 19-23: Advisory Board Requirements and Functions



## *DoD-VA Report To Congress – Finding 5*

- Inconsistent application of benefit of the doubt in exposure scenarios.
- Inadequate follow-up with veterans regarding exposure scenarios.
- NAS recommended veterans be allowed to review the scenario assumptions.

# *DoD-VA Report To Congress – Actions on 5*

- Procedures revised in 2003 to engage the veterans from the beginning. Questionnaires, fact sheets and unit histories now go to the veteran early in the process.
- Scenario of Participation and Radiation Exposure (SPARE) used to explain veterans assertions, documented facts and events, and relevant scientific/technical principles.
- The SPARE, prepared following telephone interview(s) with the veteran, is provided to the veteran for review and additional comments.

# *DoD-VA Report To Congress – Finding 6*

- Several pathways frequently neglected in exposure scenarios:
  - contamination resuspended by shock wave
  - dermal exposure from skin contamination
  - exposure from ingestion of contaminated materials

# *DoD-VA Report To Congress – Actions on 6*

- **Actions Completed**

- Some shock wave resuspension scenarios addressed
- Skin dose from dermal contamination addressed
- Ingestion dose addressed

- **Ongoing Actions**

- Will complete analysis of potential resuspended prior contamination for remaining Nevada Test Site operations (primarily Operation PLUMBBOB)



# *DoD-VA Report To Congress – Finding 7*

- External gamma dose upper bounds often underestimated substantially.
- **Actions**
  - DTRA issued interim guidance (July 2003) providing factors for determining credible upper bounds from “best estimate doses.” Now incorporated in NTPR Policy & Guidance Manual
  - Will complete development of improved methodologies using probabilistic approaches.

## *DoD-VA Report To Congress – Finding 8*

- Estimates of internal dose are intended to be “high-sided”, but may not always be so; i.e. correspond to upper bound with a 95% confidence.
- **Actions Completed**
  - DTRA interim guidance (July 2003) provided factors for calculating upper bound based on “high-sided estimate.” Now incorporated in NTPR Policy & Guidance Manual.
  - Draft report developed on inhalation doses in high re-suspension scenarios.

# *DoD-VA Report To Congress – Finding 9*

- The upper bound on neutron dose component was always underestimated.
- **Actions Completed**
  - DTRA interim guidance (July 2003) provided factor for calculating upper bound based on “best estimate” dose. Now incorporated in NTPR Policy & Guidance Manual.
  - Draft report developed on estimating neutron dose upper bound.



## *DoD-VA Report To Congress – Finding 10*

- VA adds upper bound estimate of the external dose to reported “high-sided” inhalation dose and/or beta skin dose.
- Implies unnecessary difficulties in combining dose contributions and their uncertainties.
- **Actions Completed** – None to date.
- **Future Actions** – VA’s recent adoption of IREP has facilitated this process.
  - DTRA will test models against realistic data sets.



# *DoD-VA Report To Congress – Finding 11*

- Correlations are not often accounted for when combining various doses to arrive at a total organ dose.
- **Actions Completed** - None to date.
- **Ongoing and Future Actions**
  - Current methods evaluated by NTPR Integrated Product Team (IPT) on a case-by-case basis using probabilistic methods to assess credibility of estimated upper bounds.
  - NTPR IPT will continue to investigate the extent to which correlations between parameters and exposure pathways should be taken into account.

# *DoD-VA Report To Congress – Finding 12*

- DTRA's specific methodology for reconstruction doses is often poorly documented or not documented at all.
- **Completed Actions**
  - Standardized operation reports, forms and templates.
  - NTPR's Policy & Guidance Manual has been updated and released for implementation.



# *DoD-VA Report To Congress – Finding 13*

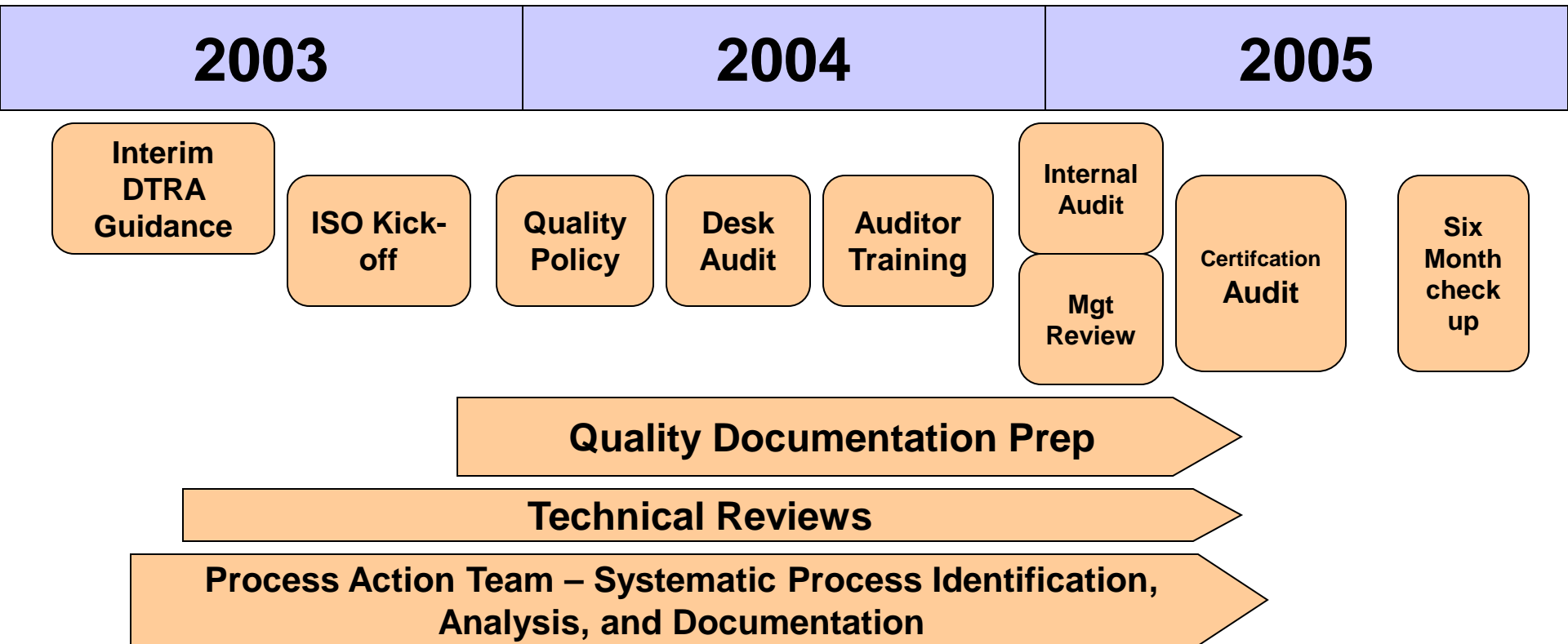
- DTRA must develop, implement, and maintain an auditable documentation system.
- **Completed Actions**
  - Implemented DTRA interim guidance for documenting all assumptions, data, historical information, veteran input, evaluations, and results of dose reconstructions. Now incorporated into NTPR Policy & Guidance Manual.



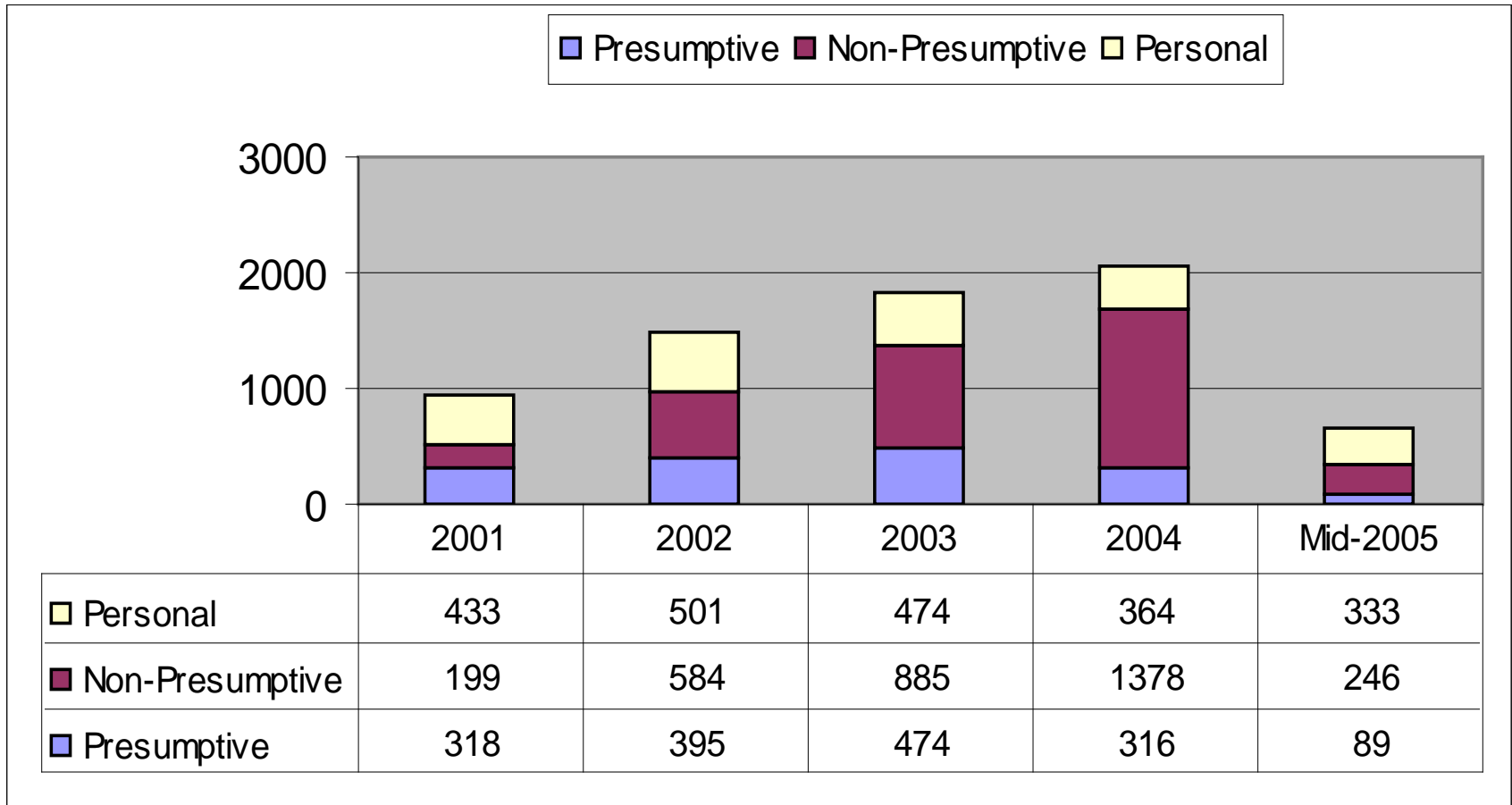
# *DoD-VA Report To Congress – Finding 14*

- DTRA needs to develop a comprehensive quality management system that encompasses all aspects of the dose reconstruction program.
- **Completed Actions**
  - Developed NTPR Quality Management System to document program processes and procedures.
  - Achieved ISO 9001 certification, after undergoing a two-day certification audit with no non-conformities
- **Ongoing and Future Actions**
  - ISO 9001 certification is good for 3 years; internal audit schedule for 2005 is on track.
  - External ISO auditor will conduct focused surveillance visits every 6 months with next visit in late 2005.

# *DoD-VA Report to Congress - ISO 9001 Certification*



# Workload - Incoming Cases



# Workload – Backlog Reduction Goal

