

Update on Nuclear Test Personnel Review (NTPR) Program

***Brief for: Veterans' Advisory Board
on Dose Reconstruction (VBDR)***

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Time: 10:45 PM – 11:15 PM

Date: June 10, 2009





Briefing Outline

- Program update
 - Metrics
 - Dose reconstruction advances
 - QA advances
 - Communication advances
- VBDR-DTRA* recommendation status
- The road ahead

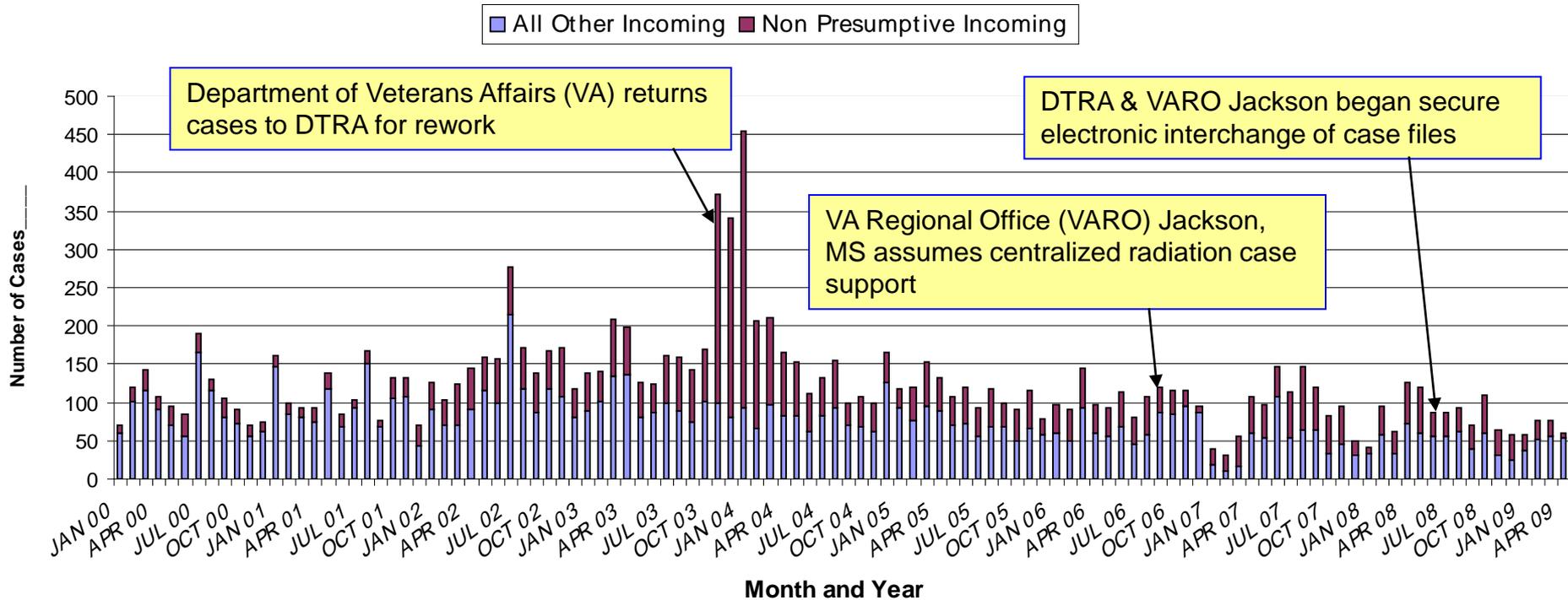


*DTRA: Defense Threat Reduction Agency



Metric: Incoming Cases

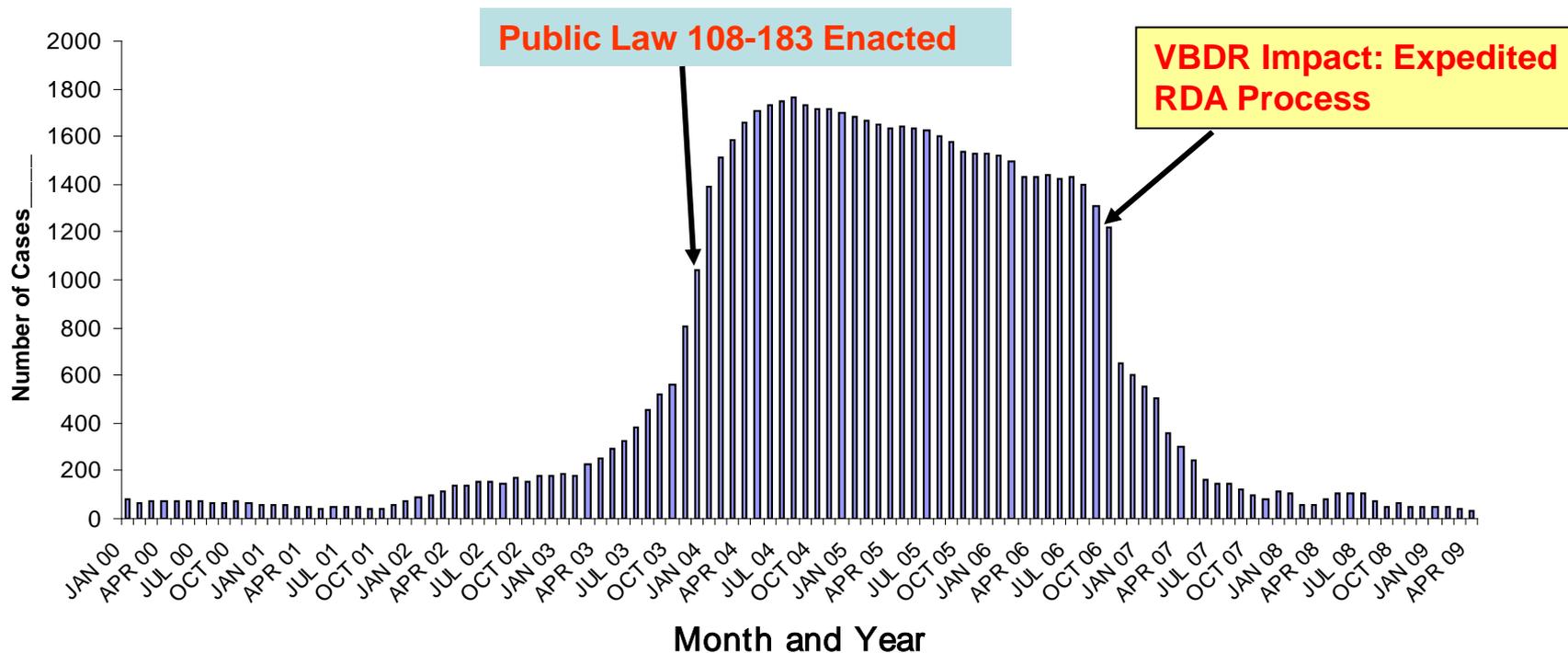
Incoming Case Load (January 2000-April 2009)





Metric: Case Load

Non-Presumptive Pending Case Load (January 2000- April 2009)





Other Metrics

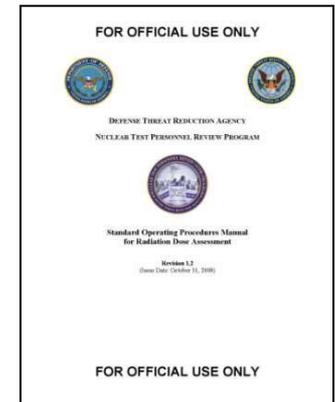
- **Mean Case Response Time (2009): 52 days**
- **Maximum Case Pending Time (2009): 177 days**
- **Outreach Phone Calls (2009): 230**

Summary: Optimized, steady-state condition



Dose Reconstruction Advances

- Since last VBDR meeting:
 - NTPR Radiation Dose Assessment (RDA) SOP, revision 1.2 was published. This revision includes initial publication of “Expedited Radiation Dose Assessment” procedure.
 - NCRP published the NTPR sponsored report no. 158, "Uncertainties in the Measurement and Dosimetry of External Radiation".



NCRP REPORT No. 158

UNCERTAINTIES IN THE
MEASUREMENT AND
DOSIMETRY OF EXTERNAL
RADIATION





Dose Reconstruction Advances

- Numerous technical basis documents (TBD) nearing publication. Extensive peer-review has been completed.
- TBD's will support next revision of NTPR's RDA SOP, rev. 1.3.
- NTPR software (NuTRIS) has been updated to reflect continuing evolution of VBDR recommended Decision Summary Sheets.



QA Advances (VBDR-NTPR)

- **NTPR quarterly QA submission to VBDR includes:**
 - Program history & projected advances
 - Metrics
 - Ongoing peer-review & updated SOPs
 - Double-blind RDA analysis & lessons-learned
 - Decision Summary Sheet (DSS) compilation
- **VBDR-NTPR QA Focus:**
 - Double-blind RDA intercomparisons
 - DSS
 - Expedited RDAs

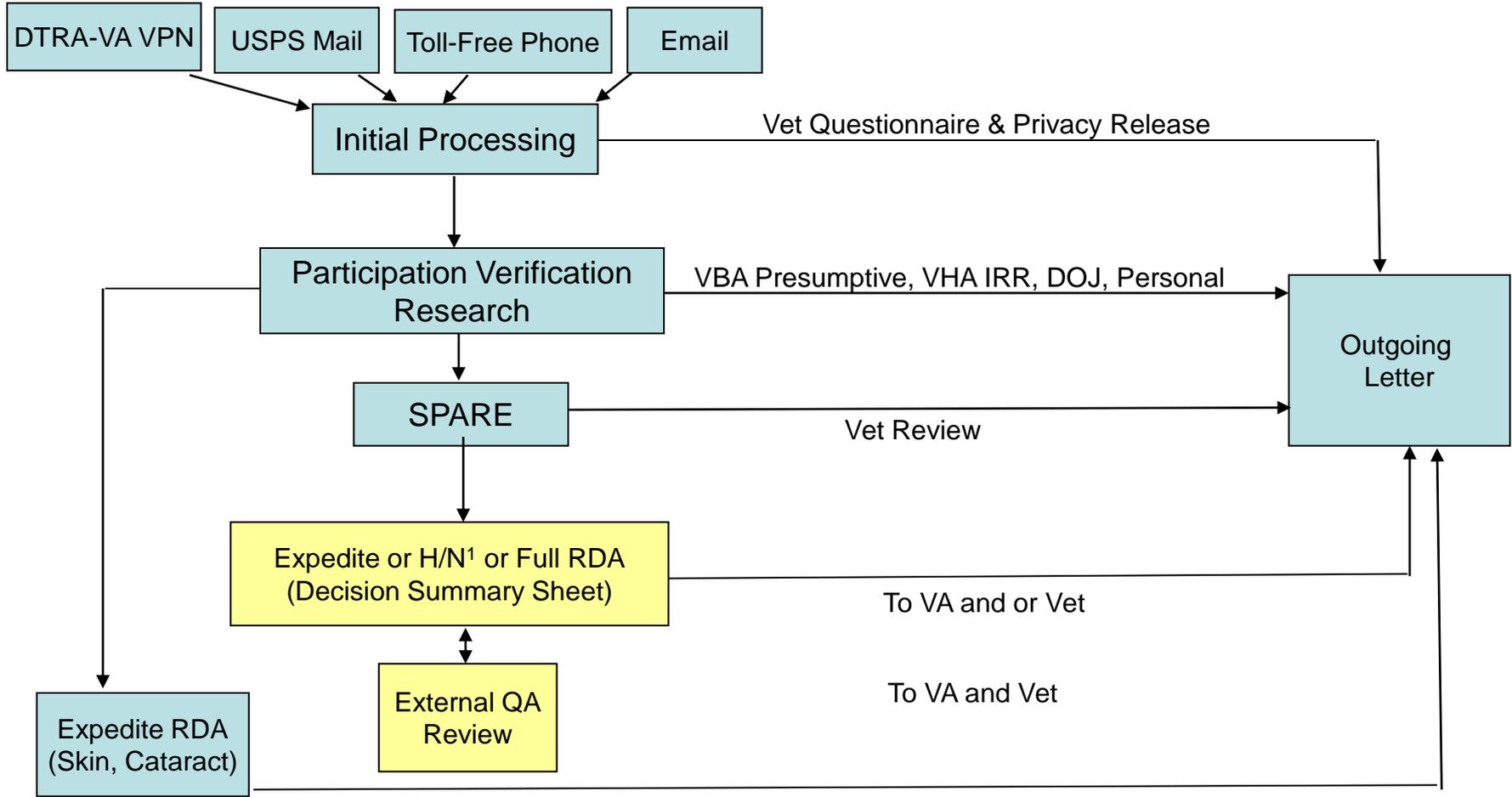


QA Advances

- **Double-blind RDA Intercomparisons:**
 - Five completed (most recent – Mar 2009)
 - Continual improvement noted
 - Has resulted in improved RDA SOP
 - Procedure:
 - RDA performed independently by an NTPR analyst and two non-NTPR analysts
 - NTPR external QA group provides comparative analysis and “lessons learned”
 - “Lessons learned” are then basis for revising NTPR RDA SOP



QA Advances (Case Processing)



1 – H/N: Hiroshima & Nagasaki



QA Advances

- **Decision Summary Sheet (DSS):**

- Implemented Mar 2008
- Format:
 - Background Information
 - Major decisions made to develop RDA, along with rationale, assumptions, & references
- NTPR RDA SOP, ver. 1.2 describes report format and protocol. DSS (ver. 3) is an automated product of NTPR's principal software application (NuTRIS). Data fields are captured digitally and support data analysis.
- Two types of DSS:
 - Full RDA DSS
 - Expedited or H/N RDA DSS

Present focus is on NTPR Program Manager's completion of expedited or H/N RDA DSS



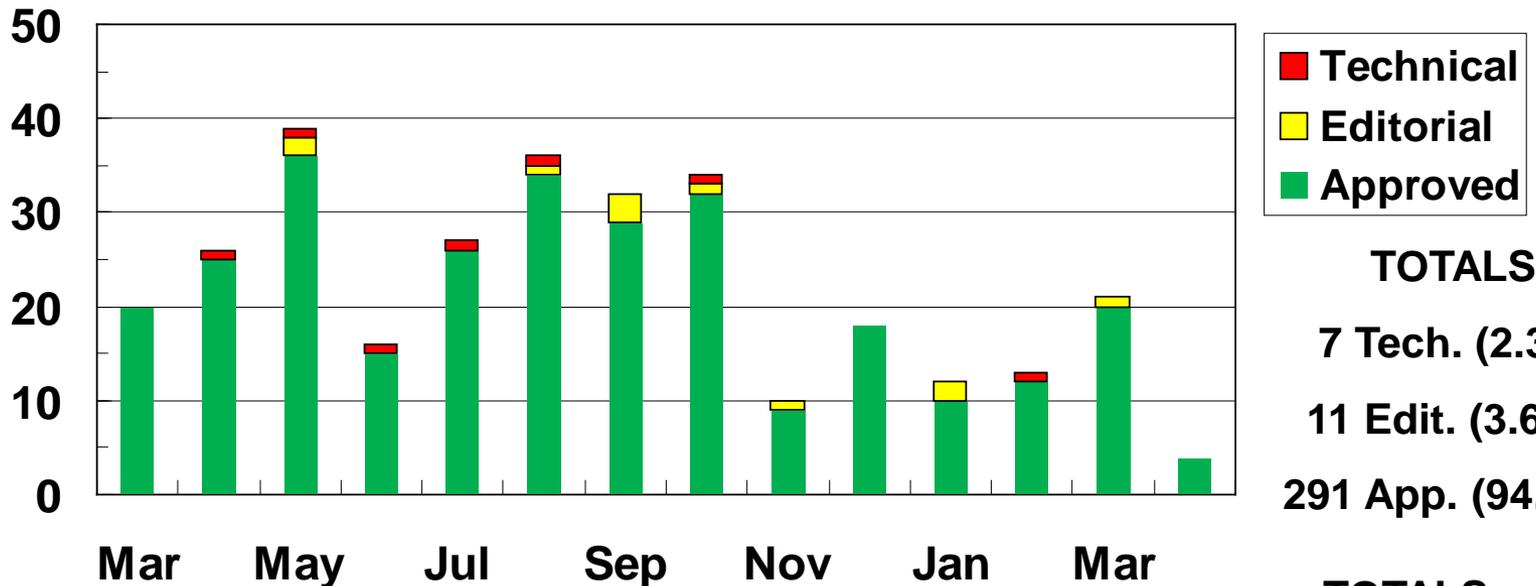
QA Advances

- **Expedited RDAs (Implemented Jan 2006):**
 - Jan 2006 - Dec 2008 RDA completion statistics:
 - 1,820 Expedited
 - 556 Full
 - 173 H/N (tracked as of May 2007)
 - Impact (Based on Jan 2006 – Dec 2008):
 - NTPR case backlog eliminated
 - Increased favorable VA medical opinions (9 to 29%)
 - Improved NTPR case processing time
 - Achieved NTPR cost savings: \$20.3M



QA Advances

External QA DSS Reviews (March 2008–April 2009)



TOTALS:
 7 Tech. (2.3%)
 11 Edit. (3.6%)
 291 App. (94.1%)

	Mar	May	Jul	Sep	Nov	Jan	Mar	TOTALS:							
EXP	17	18	30	10	23	21	23	18	5	14	6	8	13	3	210
H-N	3	8	9	6	4	15	9	16	5	4	6	5	8	1	99



Communication Advances

- NTPR releases listing of all vets exceeding 5 rem (whole body) to VA, to assist in veteran outreach
- NTPR demographic analysis (for VBDR):
 - Mean age¹: 82
 - % Surviving Vets²: 39%
 - No. Surviving Vets²: 190,000 from original cohort of 488,000

1: Derived from NTPR's NuTRIS database

2: Derived from Social Security Administration, Life Table, 2004 (Male)



VBDR-DTRA Recommendation Status

- VBDR-DTRA recommendation (4 of 18 remain open):
 - 5: Double-blind RDA effort
 - 6: NTPR quarterly QA metric submission to VBDR
 - 7: RDA SOP includes appropriate treatment of upper bounds
 - 14: NTPR discontinues use of default upper bound factors
- Recommendations 7 & 14 should close by the end of the year
- Recommendations 5 & 6 will remain open
 - Recommendation 5, is a QA effort that will continue until RDA production ceases
 - Recommendation 6 will continue until VBDR closes



The Road Ahead

- Dec 2009:
 - Publish NTPR RDA SOP, rev. 1.3, on DTRA website
 - Complete VBDR-DTRA recommendations 7 & 14
- Dec 2010:
 - Revise 32 CFR 218, "DTRA Dose Reconstruction Policy"