

Great Lakes Ballast Water Management Exam Program



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Transport Canada / U.S. Coast Guard / St. Lawrence Seaway



Joint Ballast Water Management Exam Program

- USCG
- Transport Canada
- St Lawrence Seaway (US & Canada)
- DFO Science
- NOAA / GLERL



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Joint Agency - Mission Statement

Reduce the risk of introducing Aquatic Invasive Species into the Great Lakes via ballast water by enforcing existing regulations and educating mariners in Best Management Practices



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The St. Lawrence Seaway



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Regulatory History in Great Lakes

- 1989 Voluntary Best Practices (Canada)
- 1993 Ballast Water Management Regulations (U.S.)
- 1999 Mandatory Ballast Water Reporting (U.S.)
- 2000 National Ballast Water Guidelines (Canada)
- 2004 Civil Penalties for Non Submission (U.S.)
- Aug 2005 Best Management Practices for No Ballast On Board (NOBOB) vessels (U.S.)
- June 2006 Ballast Water Regulations including NOBOB requirements (Canada)



Great Lakes NOBOB's



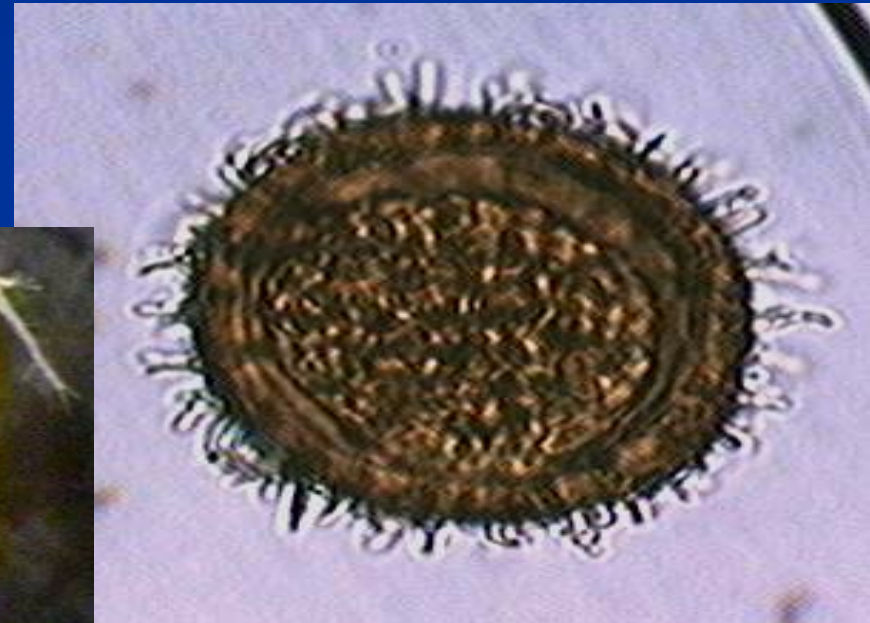
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NOBOB Challenges

- 2005 NOAA/GLERL/ U of Windsor Research confirmed the risk of spread of ANS through residual ballast water and sediment in tanks once ballasted then de-ballasted in Great Lakes
- 70-80% of voyages into Great Lakes are NOBOB



What are NOBOBs carrying?



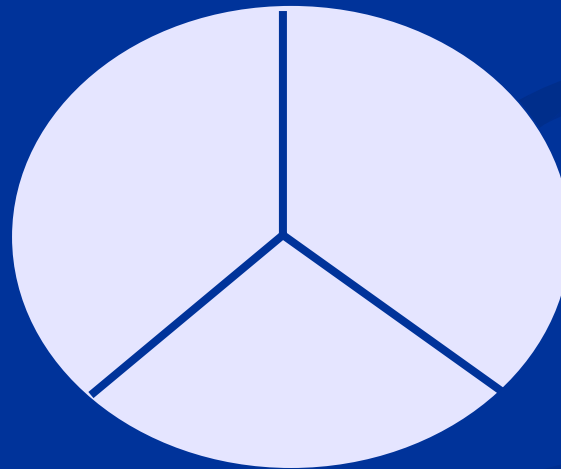
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Joint Ballast Tank Exam Policy

Joint Comprehensive Ballast Water Management
and Tank Exams in Canada, Seaway and U.S.

Ballast Water
Management
Practices



Ballast Water
Reporting

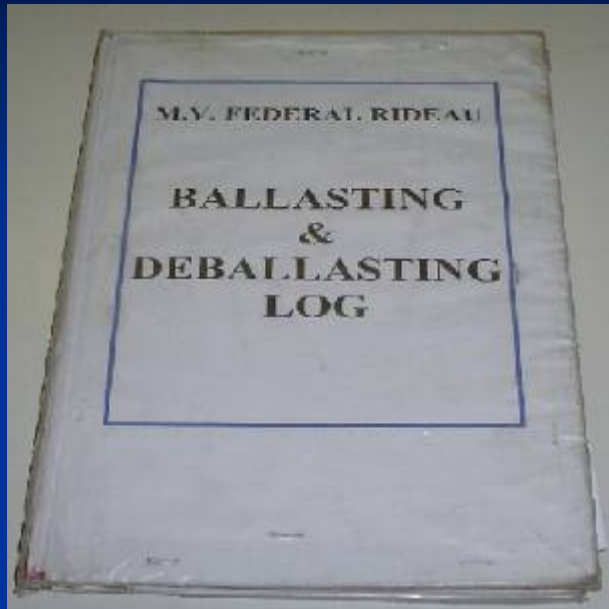
Sampling of Tanks



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Ballast Water Management Practices



- Review records, logs
- Interview vessel crew



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Joint Agency BWM Exam Report

- One job-aide is used by all agencies
- Questionnaire includes questions that cover requirements of all 4 jurisdictions
- Agencies share results with each other
- Enforcement rights retained by each agency



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Great Lakes - St. Lawrence Seaway System
Joint Agency Ballast Water Management Exam Report
To be filled out by the attending inspectors from
Canada, St. Lawrence Seaway Corporations, or United States



1. SHIP NAME _____ 2. FLAG _____

3. IMO No. _____ 4. LAST PORT OF CALL _____

5. OWNER _____ 6. MANAGER (TECHNICAL) _____

7. ARE COPIES OF THE FOLLOWING PUBLICATIONS ON BOARD?

- | | | |
|--|------------------------------|-----------------------------|
| a) IMO RESOLUTION A 868 (20): | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| b) US 33 CFR 151 SUBPARTS C & D - BALLAST WATER MANAGEMENT FOR CONTROL OF NON INDIGENOUS SPECIES IN THE GREAT LAKES (C) AND WATERS OF THE UNITED STATES (D): | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| c) 70 FEDERAL REGISTER 51831 - BALLAST WATER MANAGEMENT FOR SHIPS ENTERING THE GREAT LAKES THAT DECLARE NO BALLAST ON BOARD: | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| d) CANADA'S BALLAST WATER CONTROL AND MANAGEMENT REGULATIONS: | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| e) TP 13617 E - A GUIDE TO CANADA'S BALLAST WATER CONTROL AND MANAGEMENT REGULATIONS : | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| f) THE SHIPPING FEDERATION CODE OF BEST PRACTICES FOR BALLAST WATER MANAGEMENT: | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

8. IS THERE A BALLAST WATER MANAGEMENT PLAN (BWMP) ON BOARD? (IF NOT PROCEED TO QUESTION 19) YES NO

9. THE BWMP IS PROVIDED BY: OWNER MANAGER OTHER _____

10. THE BWMP WAS REVIEWED BY: FLAG STATE _____ CLASS _____

11. IS THE BWMP SPECIFIC TO THIS SHIP? YES NO

12. DO THE SENIOR OFFICERS DEMONSTRATE A WORKING KNOWLEDGE OF THE BWMP? YES NO

13. DOES THE BWMP CONTAIN DETAILED INSTRUCTIONS FOR SUBMITTING BALLAST WATER REPORTS? YES NO

14. DOES THE BWMP ACKNOWLEDGE SPECIAL REQUIREMENTS FOR GREAT LAKES ENTRY? YES NO

15. DOES THE BWMP PRESCRIBE BEST MANAGEMENT PRACTICES? YES NO

16. DOES THE BWMP CONTAIN PROCEDURES FOR FULL EXCHANGE? YES NO

17. DOES THE BWMP CONTAIN PROCEDURES FOR MID OCEAN FLUSHING OF EMPTY TANKS? YES NO

Applicability Section explains different requirements

The following questions are directly related to regulations currently in force:

United States:

33 CFR 151 – Subpart C and D. Ballast Water Management for Control of Non Indigenous Species in the Great Lakes (C) and Waters of the United States (D).

#'s 8. 11. 12. 13. 14. 15. 16. 18. 21. 22.

Canada:

Ballast Water Control and Management Regulations (2006)

#'s 8. 10 (for Canadian Ships) 13. 14* 15*. 16. 17. 18. 19*. 20*. 21*. 22*. 23*. 24*. 25.

Seaway Practices and Procedures.

#'s 13. 14. 15*. 16*. 18*. 19*. 20*. 21*. 22*. 23*. 24*.

* By reference to The Shipping Federation of Canada Code of Best Practices for Ballast Water Management

Tank Sampling

- Looking for Evidence of Salinity > 30 ppt
- Sampling via “sounding tube” that extends to the bottom of the tank
- If enough water is present, a sample is raised to the deck and sampled with refractometer
- Dry Tanks are reference in the Log books



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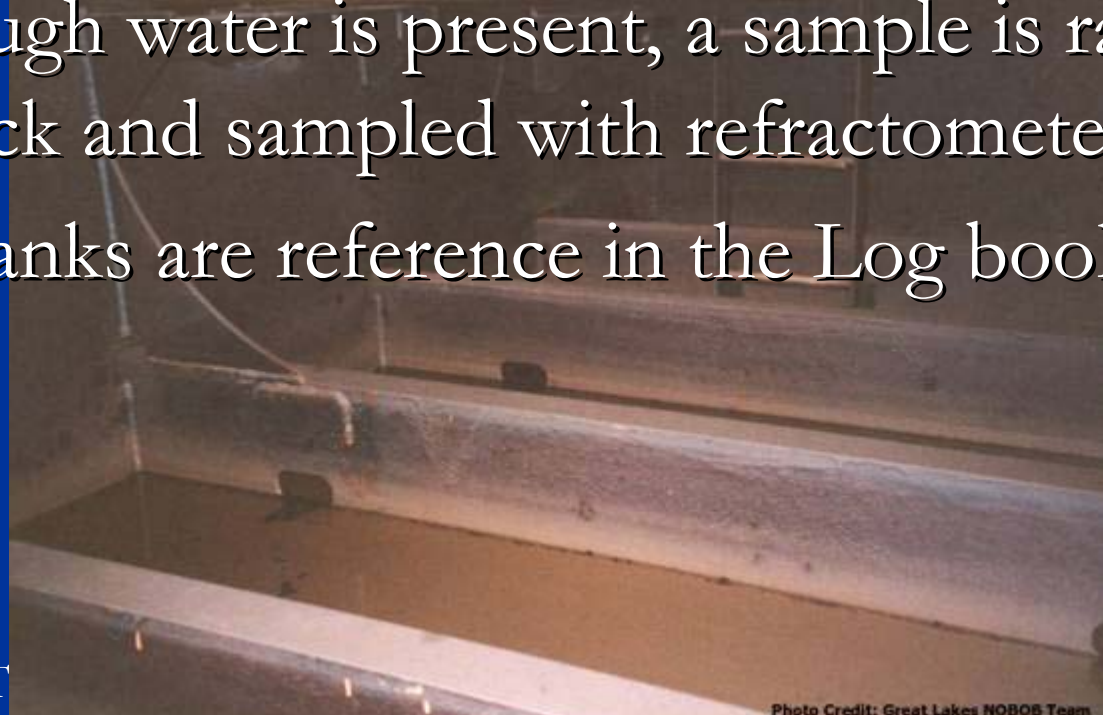


Photo Credit: Great Lakes NOBOS Team

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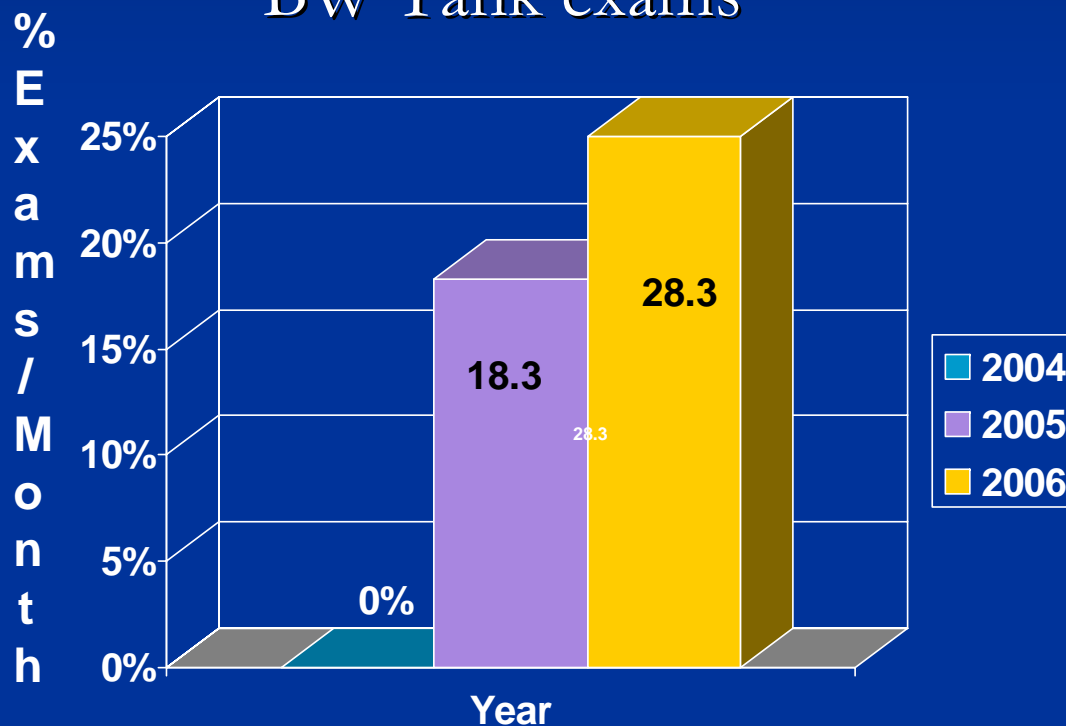
Compliance and Enforcement Objectives

- Inspect all vessels with ballast on first voyage
- Target and inspect high risk vessels on their subsequent voyages
- Target 100% if resources available
- Data Collection (science and enforcement)
- Increase compliance with regulatory requirements



B.W Tank Exams

Goal: Increase the number of
BW Tank exams



2005

2005 May-Dec

147 Tank Exams

Average 18.3 exams per month

2006

2006 April to Dec

255 Tank Exams

Average 28.3 exams per month



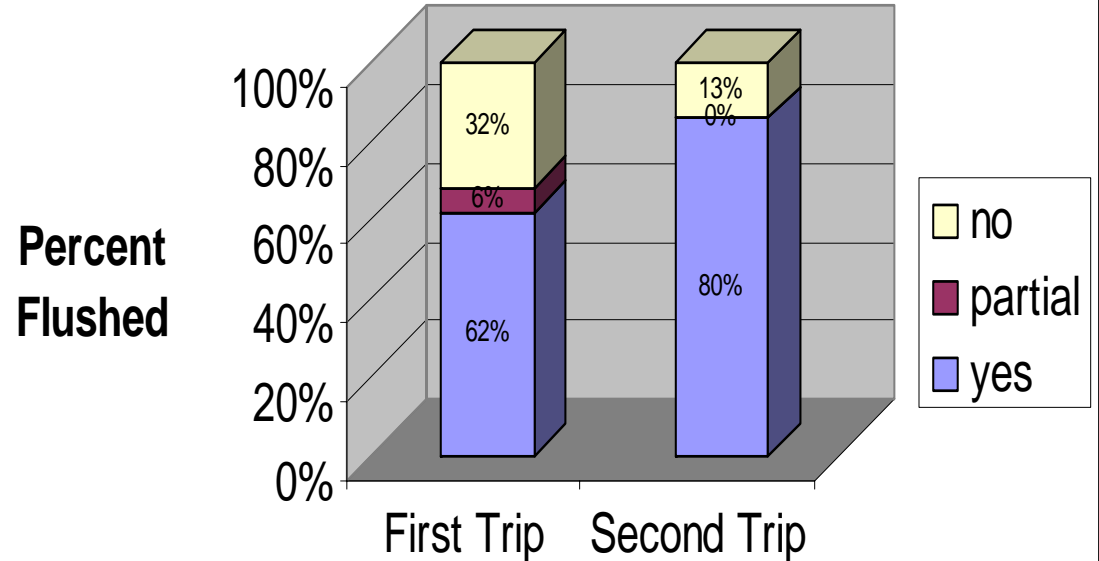
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2006 Exam Results

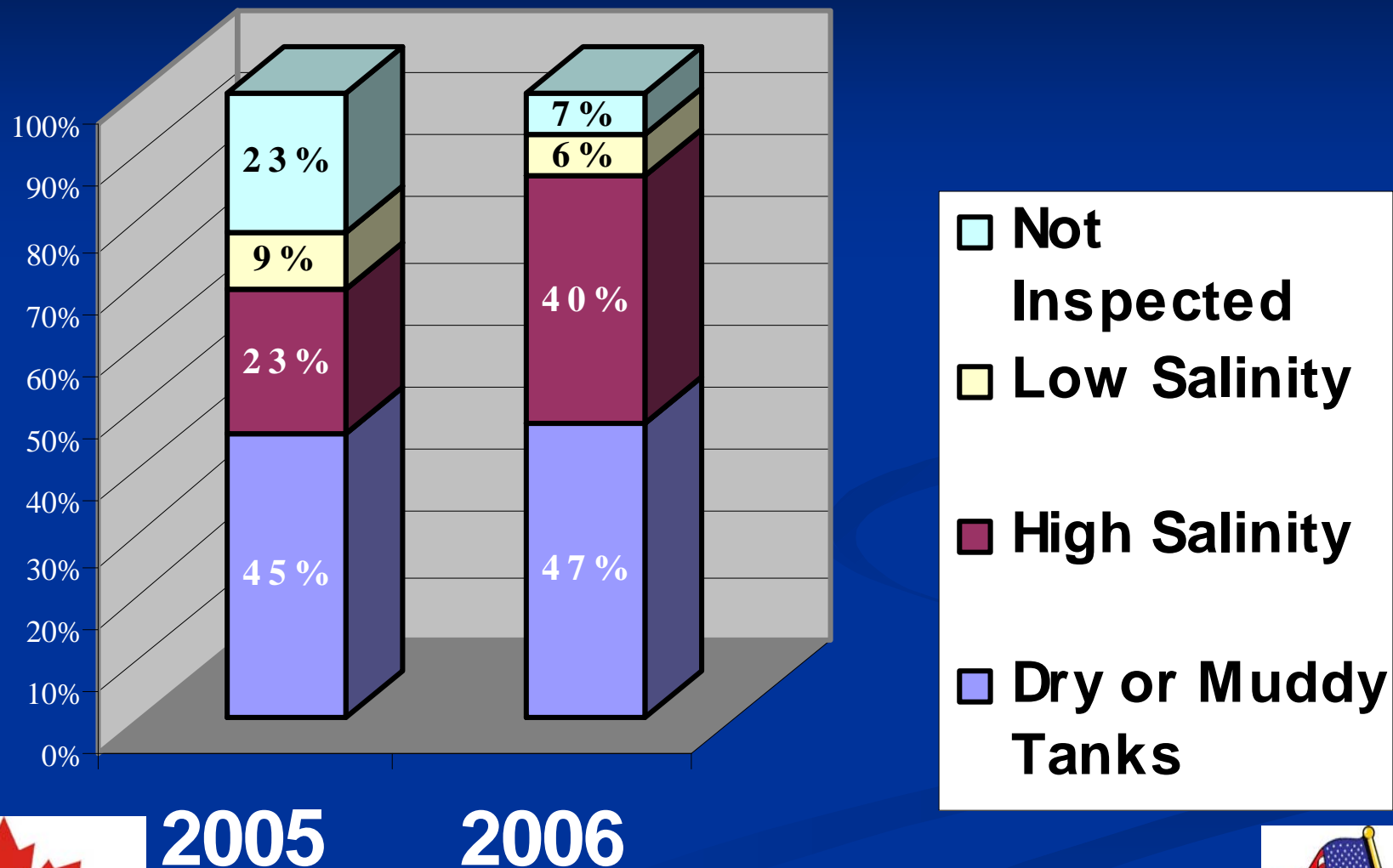
- Total # of vessels = 255
- Total NOBOB First Trippers recording salt water flushing of tanks (62%), 8 partial (6%)
- Total # of NOBOB 2nd Trippers using salt water flush(80%)

NOBOB Reported Flushed



TANK EXAM RESULTS

Goal: Decrease number of untreated tanks



2005

2006

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2007 Results to date

- 142 Ships bound for Great Lakes Examined
- 2880 tanks tested
- 2613 tanks > 30 ppt or dry low risk
- 33 tanks from high risk ports found to be dry
- 66 Non compliant tanks

100% Retained on board or treated (brine)



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Ballast Water Management

- Documentation Exam administered by St. Lawrence Seaway on records, logs and plans = 161
- Percentage with minor deficiencies = 38%
- Enforcement Action issued by USCG for missing plans = 5 (3%)
- Letter of Retention issued by USCG for non-compliant ballast water = 5 (9%)
- Increased outreach & coordination with shipping companies and agents



Future Plans



- Build common data base
- Harmonize reporting requirements
- Continue to track and analyze results



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