

Implementing the Mercury Chemical Action Plan

Status of Dental MOU



W A S H I N G T O N S T A T E
D E P A R T M E N T O F
E C O L O G Y

Goals of the Mercury Chemical Action Plan

- Virtual elimination (continual reductions) of the use and release of anthropogenic (man-made) mercury in Washington State
- Minimize human exposure to mercury through better mercury collection, disposal, and management options

Elements of the Mercury Chemical Action Plan

- Overview of what we know about human-caused sources of mercury in Washington
- List possible mercury reduction options with recommendations
- Identify research needs
- Reduction actions will be staggered based on
 - Resources
 - Knowledge
 - Availability of non-mercury alternatives

Estimated Annual Release from Point and Area Sources of Hg in WA

Source	Est. Annual Release (lbs.)	Receiving medium
Distillate Fuel #2	733	Air
Coal-fired power plants	436	Air
Manufacturing	337	Air, Land, Water
POTWs	331	Land
Oil Refineries	125	Air, land, Water
Medical & Dental Waste Autoclaves	106	Air, Land
Crematoria	57	Air
Sewage Sludge Incinerators	32	Air
Residual Fuel	29	Air
Municipal Waste Incinerators	18	Air
Gold Mining	0-777	Air, Land, Water
TOTAL	2,180 – 2,957	



2004 Dental Waste Survey



The Washington State Dental Association and the Washington State Department of Ecology have a Memorandum of Understanding (MOU) advocating the implementation of best management practices (BMPs) concerning amalgam waste and other dangerous waste streams generated at dental facilities. Please answer the following questions to help us track the implementation of BMPs across the state and provide technical assistance where needed. This baseline survey is part of the MOU. Another survey will be sent in 2005 to assess progress. The survey is brief and will take only a minute or so to complete. Please return the survey by September 30, 2004. You can also fill out this survey online and access the Dental Poster and the BMPs electronically at <http://www.ecy.wa.gov/dentalbmps/index.html> or <http://www.wstda.org>

This survey does not apply to the following practices, provided amalgam fillings are neither placed nor removed on less than 10 practice days annually: Orthodontics, Oral Surgery, Oral Medicine/ Pathology, Oral Radiology, Periodontics, Endodontics, or Prosthodontics. If your practice falls into one of these categories, check the box to the right and return this survey to be removed from the mailing list (you must include your mailing address to be removed from the list).

Please provide the city and zip code for the mailing address of this office:
 City: _____ Zip Code: _____

Amalgam Waste Generation Information

- Can we help you find appropriate disposal options for bulk mercury? YES NO
- Do you recycle the amalgam waste captured by your chair-side traps? YES NO
- From vacuum filters? YES NO
- Does your office use an amalgam separator? YES NO
- If yes, is it ISO 11143 certified? YES NO
- If yes, do you recycle the waste captured by your separator? YES NO
- If no, do you have plans to install one by August 2005? YES NO

For information on amalgam separators or ISO 11143 certification visit <http://www.ecy.wa.gov/dentalbmps/index.html>

If you have installed an ISO 11143 certified amalgam separator, please complete and submit the enclosed notification.

X-Ray Waste Generation Information

- Do you use an x-ray fixer recovery system? YES NO
- If yes, what kind of recovery system is it? Electrolytic CRC¹
- If the system is a CRC system, how many cartridges are used? ONE TWO
- If no, do you collect used fixer and recycle it through a service vendor? YES NO

For information on management of used fixer go to <http://www.ecy.wa.gov/dentalbmps/index.html>

Fold as indicated on the reverse side and secure with a piece of tape for mailing.

¹ Chemical Recovery Cartridge

Waste Management, Recycling and Disposal Information

Do you recycle: (Check all that apply to your business)

- Scrap amalgam
- Cold sterilant solutions
- Fluorescent lamps
- Extracted teeth with fillings
- Lead foils
- Lead shields and aprons

Are you maintaining waste disposal records?

YES NO

fold here

If you have questions or need more information call your nearest regional office:

Department of Ecology Regions
<http://www.ecy.wa.gov/programs/hwtr>



fold here

Department of Ecology/HWTR – Dental Survey
PO Box 47600
Olympia WA 98504-7600

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Waste Management, Recycling and Disposal Information

Do you recycle: *(Check all that apply to your business)*

Scrap amalgam

Cold sterilant solutions

Fluorescent lamps

Extracted teeth with fillings

Lead foils

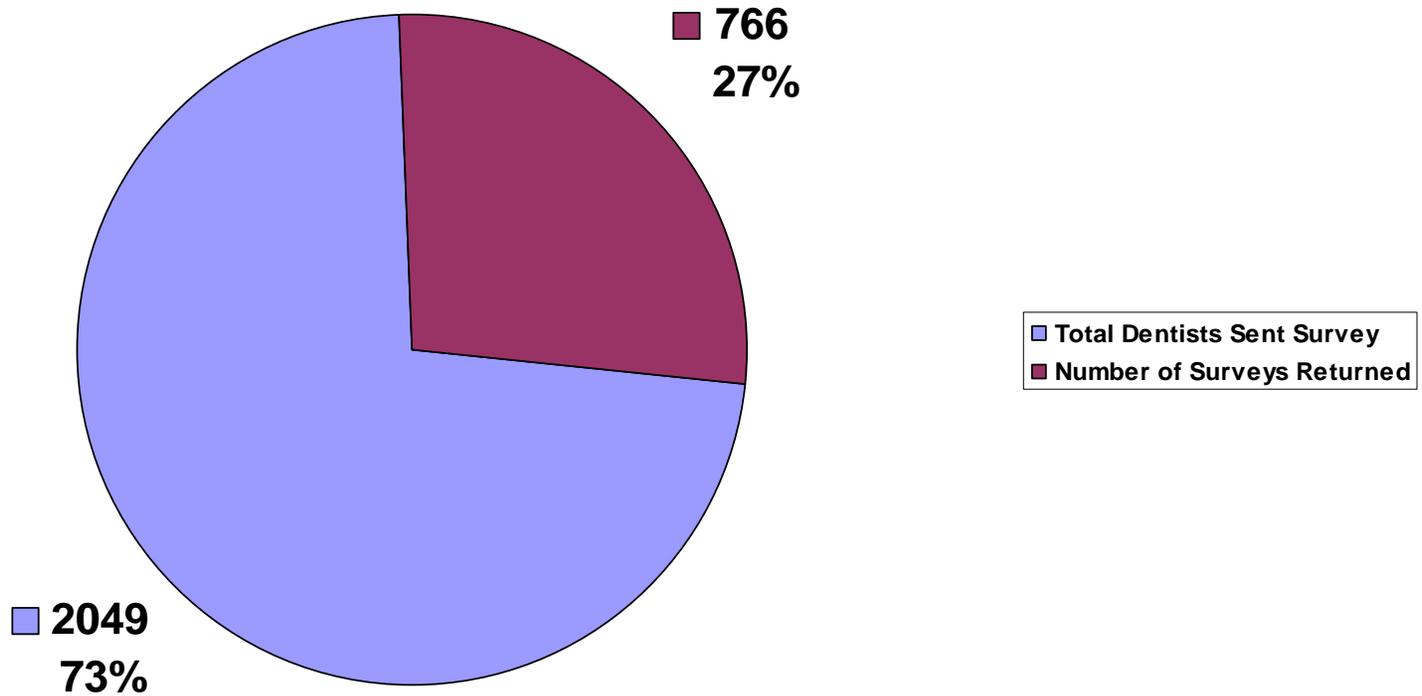
Lead shields and aprons

Are you maintaining waste disposal records?

YES

NO

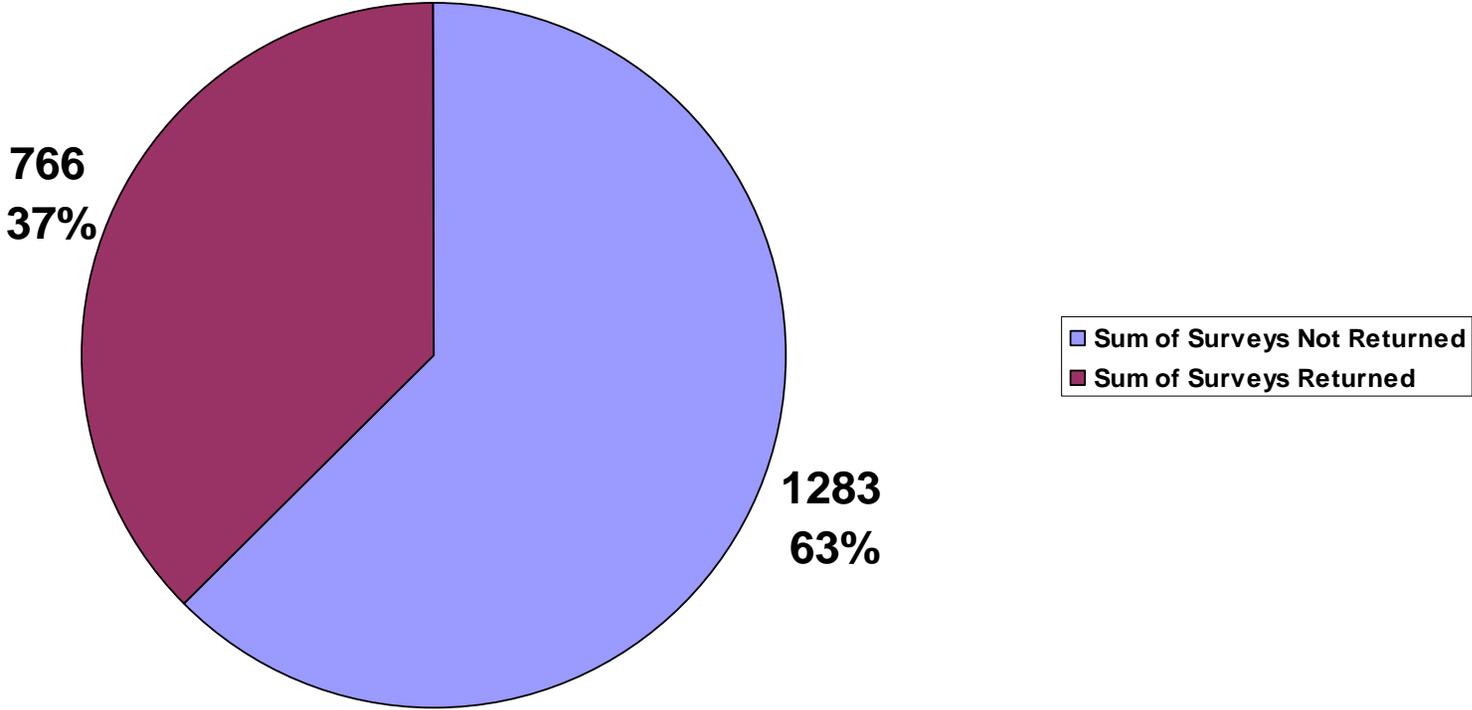
**Total Dental Offices vs. Surveys Received
Excluding King Cnty as of 3/2/2005**



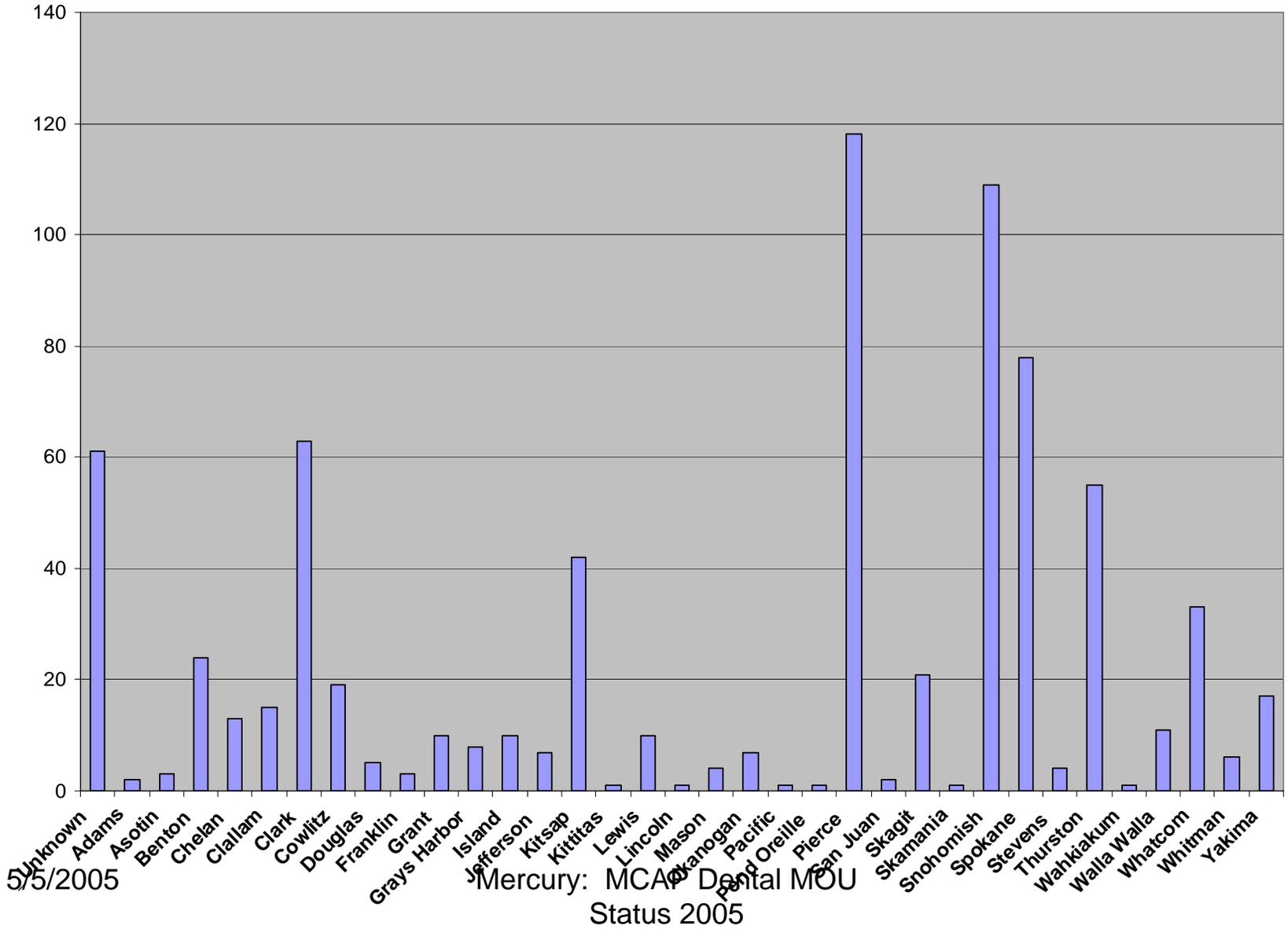
5/5/2005

Mercury: MCAP Dental MOU
Status 2005

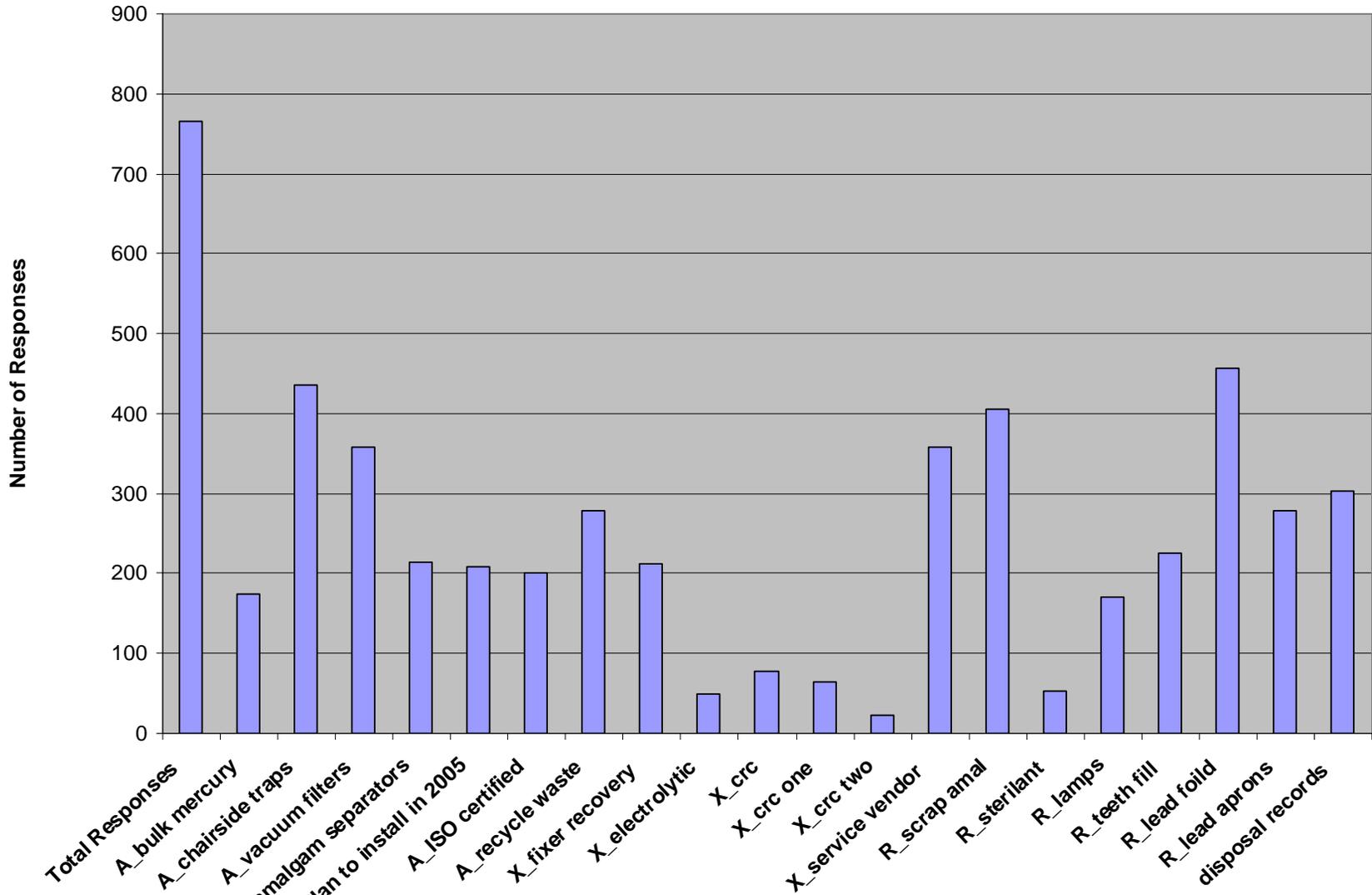
**Total Survey Data
Excluding King Cnty as of 3/2/2005**



**Total Surveys Received by County
Excluding King Cnty as of 3/2/2005**



Total Dental Survey Responses by Question Excluding King Cnty as of 3/2/2005



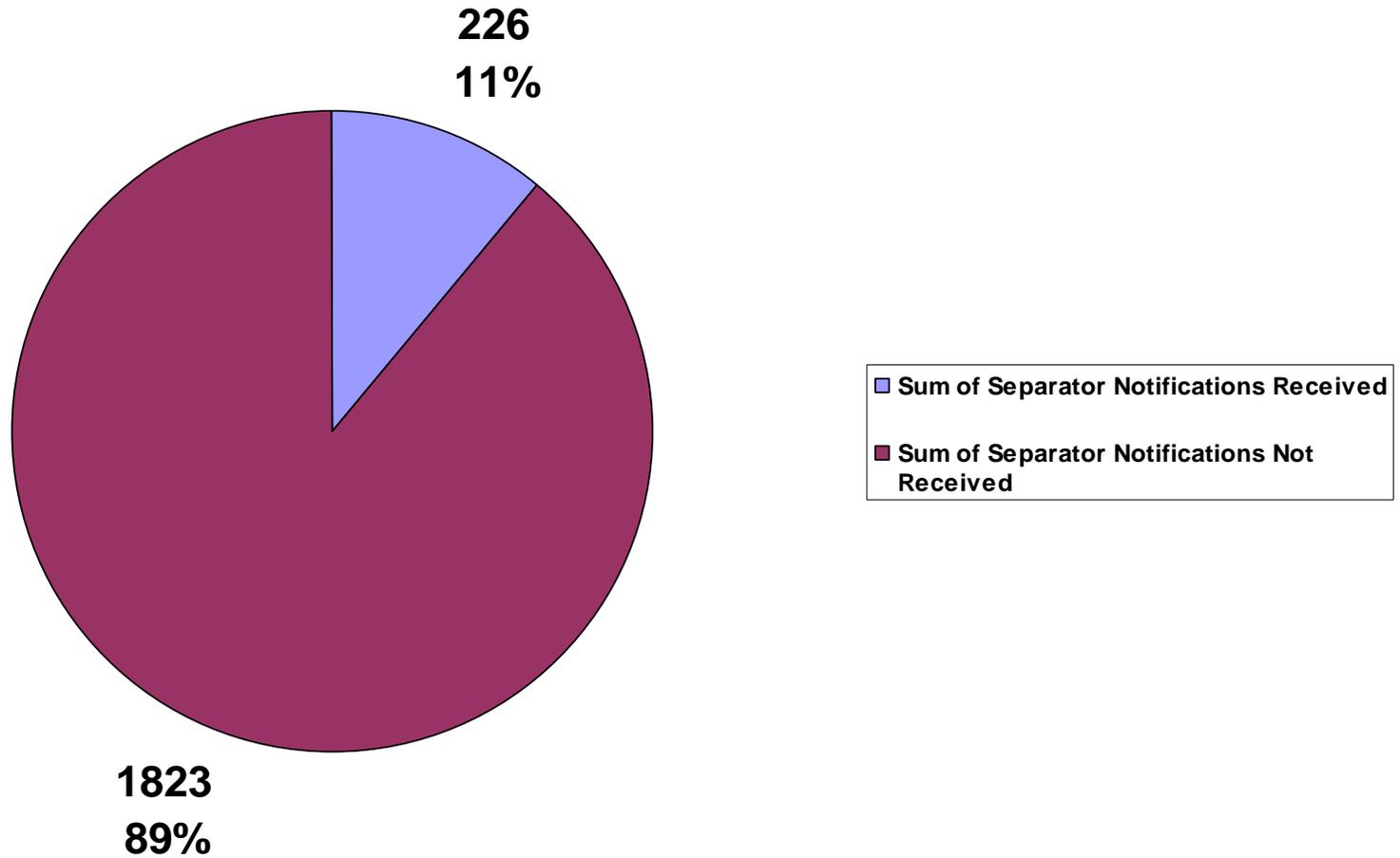
5/5/2005

Mercury: MCAP Dental MOU

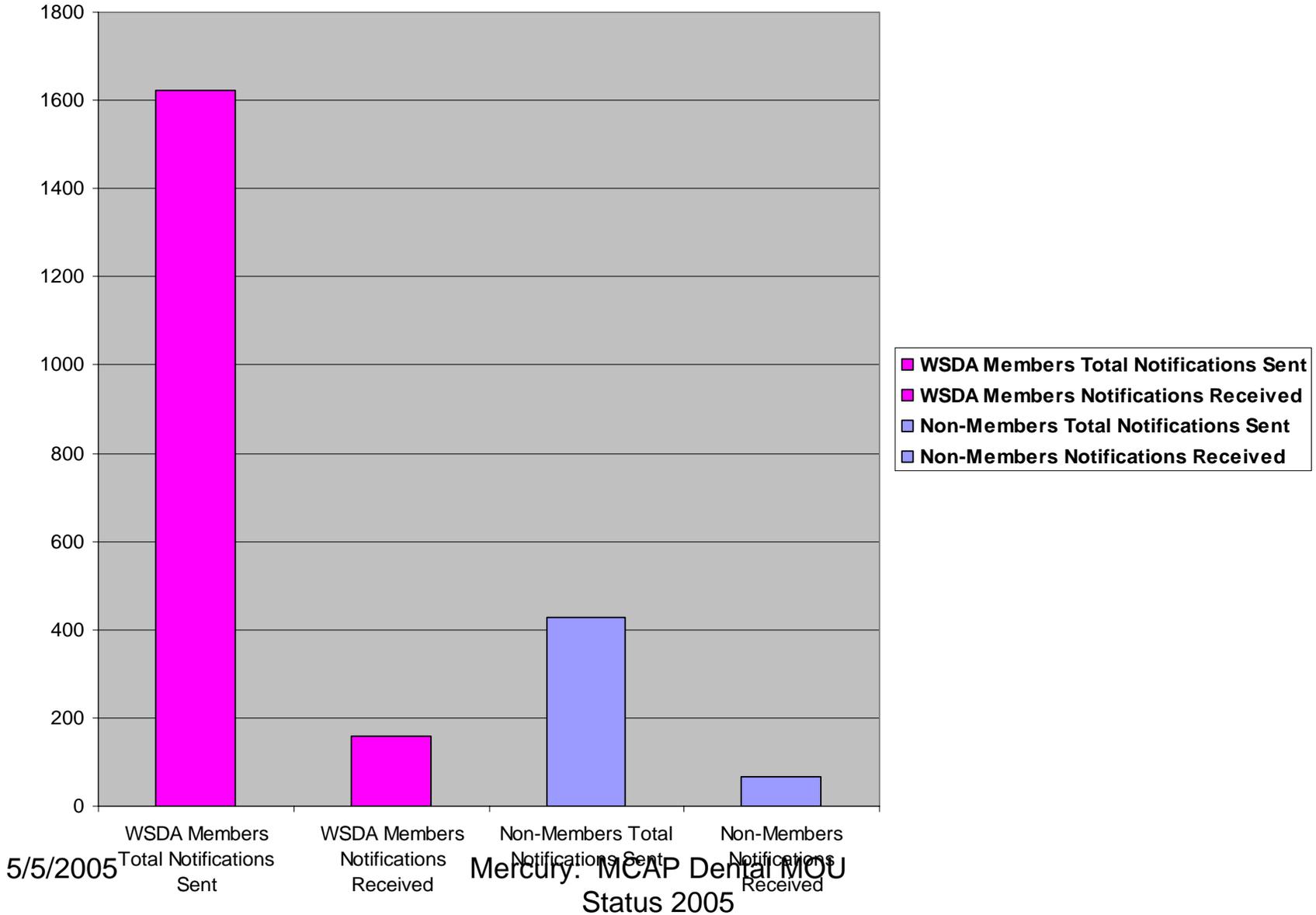
A - Amalgam, X - X Ray, R - Recycling

Status 2005

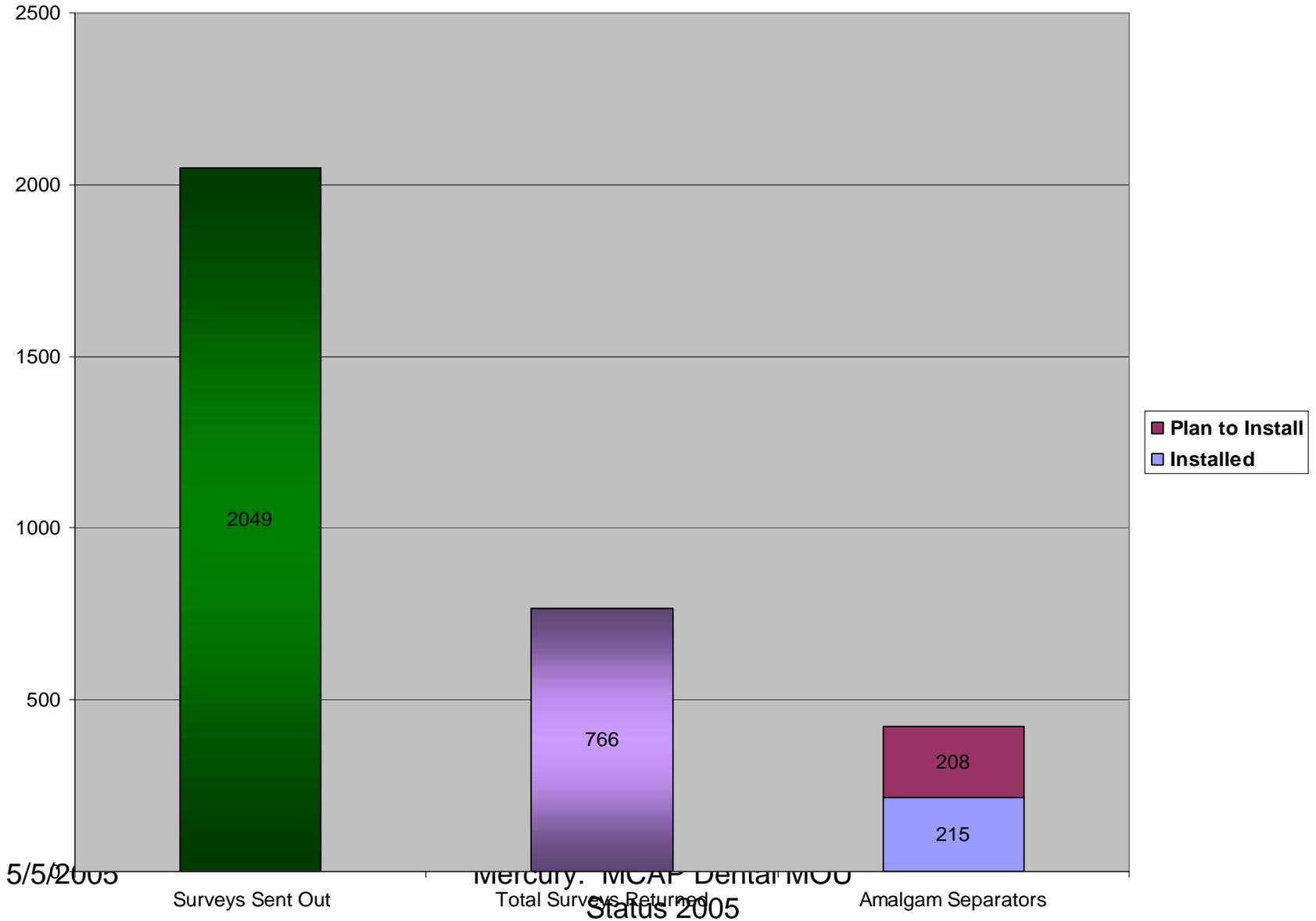
**Total Separator Notifications Received vs. Not Received
Excluding King Cnty as of 3/2/2005**



**WSDA vs Non-Member Separator Notifications Received
Excluding King Cnty as of 3/2/2005**



Relative Success of Survey Information and Amalgam Separator Installation Excluding King Cnty as of 3/2/2005



Next Steps

- Baseline data is being used to revise outreach and message
- Contractor hired to conduct more aggressive education and survey response
- Postcards reminding dentist to install separators and use BMPs in May
- Proposed mercury collection event in July

Next Steps

- Coordination with local governments separator vendors and WSDA continues
- New, final survey will be sent in July. Responses back by August 1, 2005
- Analysis and report drafted in September
- Recommendations for future work will be attached to cover letter sent to Ecology management

Additional Information

Ecology's Dental Waste Web Page:

<http://www.ecy.wa.gov/dentalbmps/>

Or contact

Maria Victoria Peeler

Ecology's Hazardous Waste & Toxics Reduction Program

P: 360-407-6704

E: peel461@ecy.wa.gov