



2016 Scientific Advisory Committee Meeting
Washington State University Campus
Spokane, WA, July 20, 2016

USTUR Health Physics Database

Maia Avtandilashvili, *Ph.D.*
m.avtandilashvili@wsu.edu

Research Associate
College of Pharmacy, Washington State University
1845 Terminal Drive, Suite 201, Richland, WA 99354
www.ustur.wsu.edu

*“Learning from Plutonium
and Uranium Workers”*





Objective

Easily searchable, standardized records of:

- ✓ Exposure incidents
- ✓ Bioassay data
- ✓ External dose
- ✓ Dose assessments
- ✓ Treatment

The screenshot displays the USTUR web interface for Case No. 0102. The interface includes a navigation menu with tabs for Admin, Medical, Rad Chem, Health Physics, Clinical, Pathology, and Next of Kin. The main content area is divided into three sections: Bioassay Summary, Detailed Data, and Index. The Bioassay Summary section contains a table with the following data:

Monitoring Type	Count
Feces	2
Urine	20
Lung	1
Skeleton	8
Whole Body	1

The Detailed Data section includes buttons for Urine, Feces, Blood, Skeleton, Lung, Liver, Wound, and WBC, along with an All Data button and an Enter Data button. The Index section contains dropdown menus for Intake Type (Mixed: Inhalation(s)/Wound(s)), Contaminant(s) (Am-241), ICRP 68 Type (M), and Chemical Form. There is also a field for HP Entered. The Search Options section includes buttons for Quick and Advanced search. The Notes section is currently empty.



Priorities



Donation Type	Deceased	Living
Whole-body	43	8
Partial-body	303	37
Total	346	45

‘New’ donations

- Highest priority

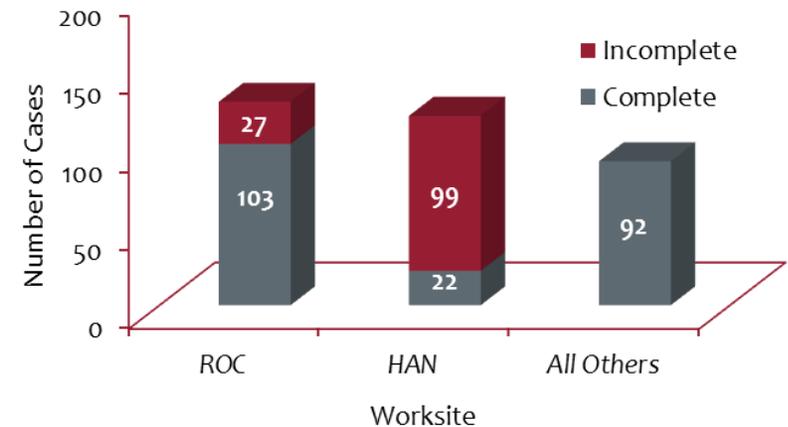
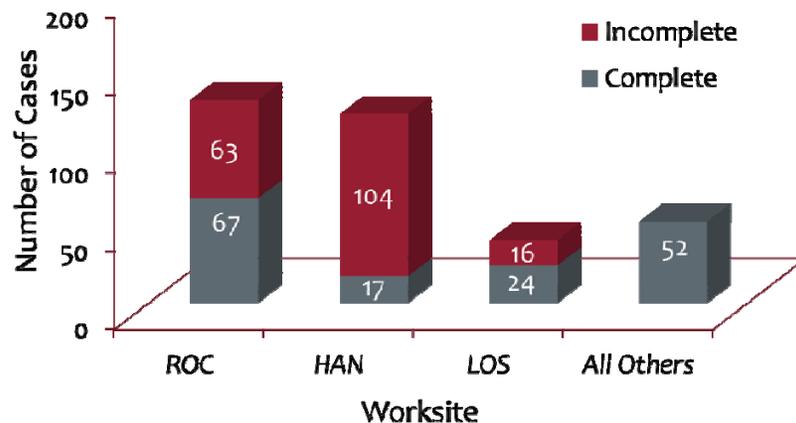
‘Old’ donations

- Worksite
- Special scientific interest



2016 Goals

- Complete ‘new’ donation cases as received
- Continue data entry for ‘old’ donations by worksites
 - ✓ Complete Los Alamos cases
- Planned:
 - ✓ 18,000–19,000 records: 40–45 cases





2016 Progress



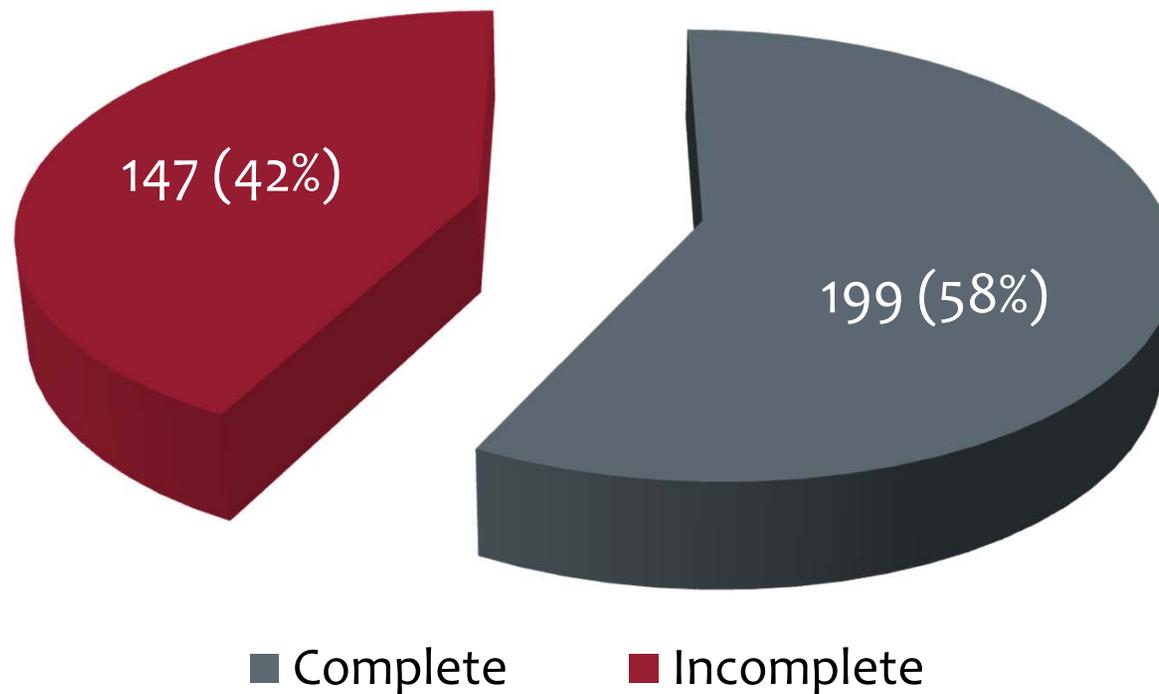
- 3 'new' donations
 - ✓ 0805, 0806, 0845
- 36 'old' donations
 - ✓ 16 – LOS, 19 – ROC, 1 – HAN
 - ✓ *Los Alamos completed*
- 2 living Registrants: *upon request*
 - ✓ 0575: Potential exposure to ^{244}Cm
 - ✓ 0950: Acute inhalation of insoluble ^{239}Pu



2016 Status

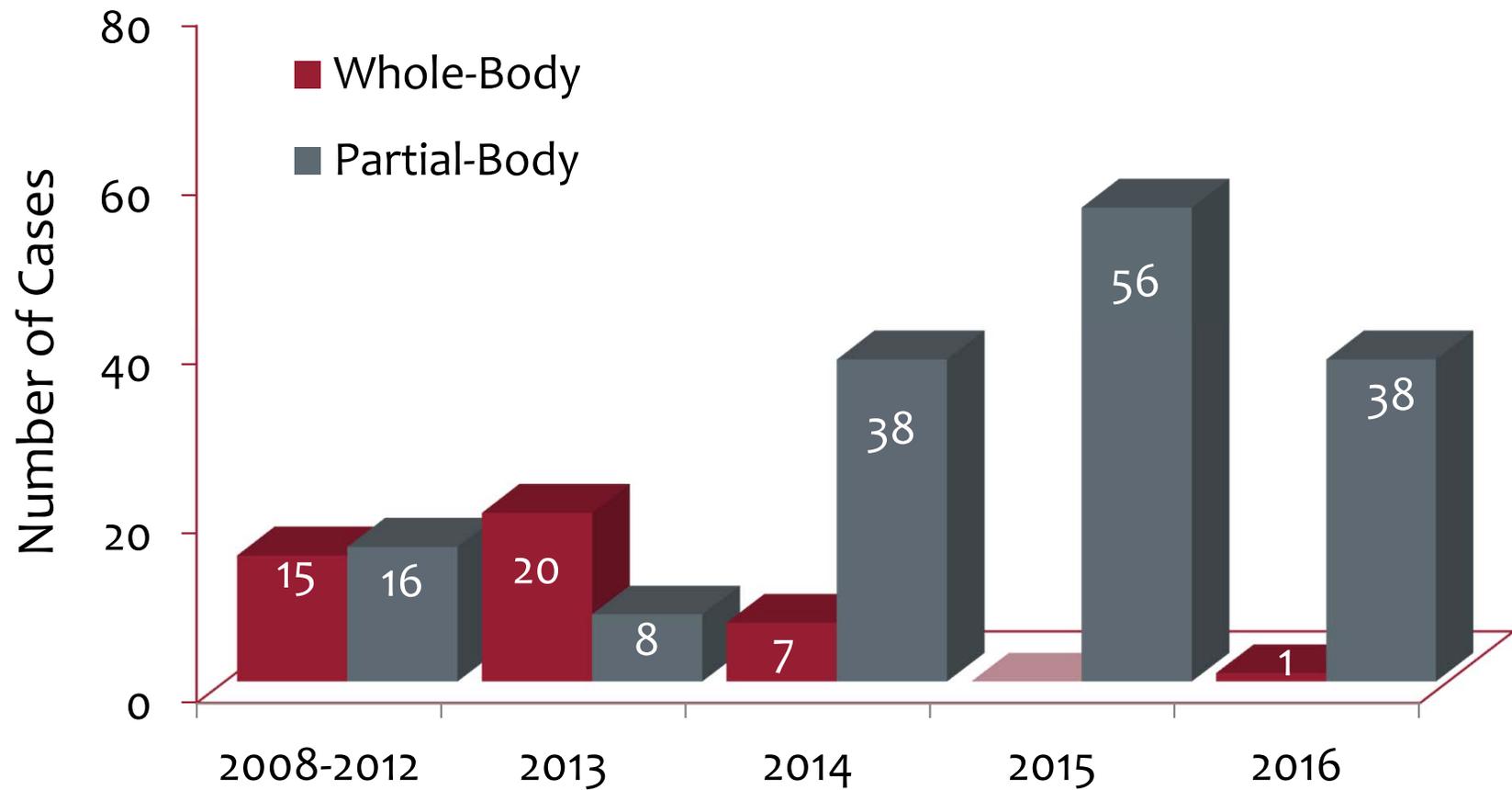
As of July 10, 2016, 199 of 346 donation cases completed

- 43 whole-body
- 156 partial-body



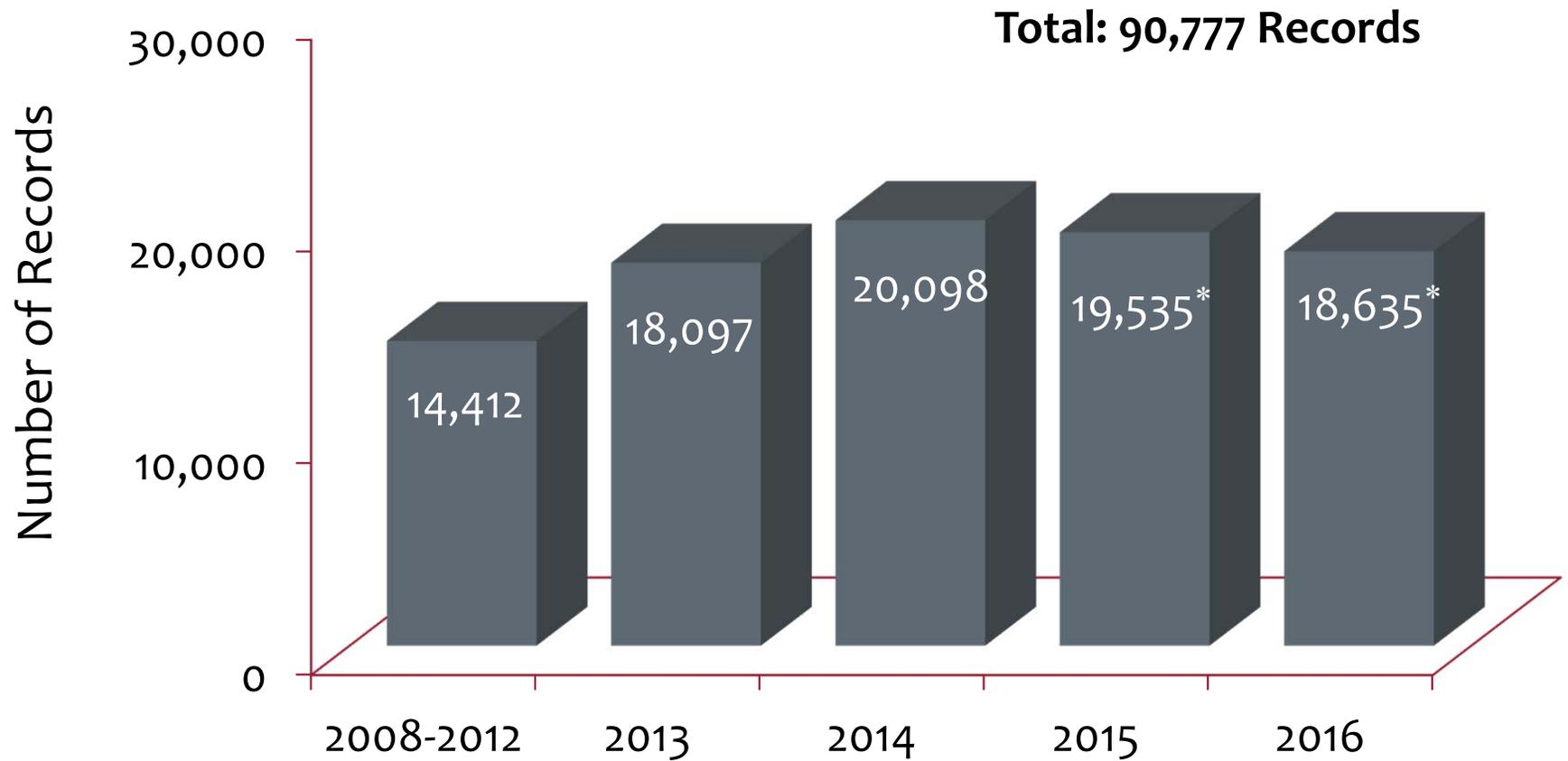


2008 – 2016 Progress by Case





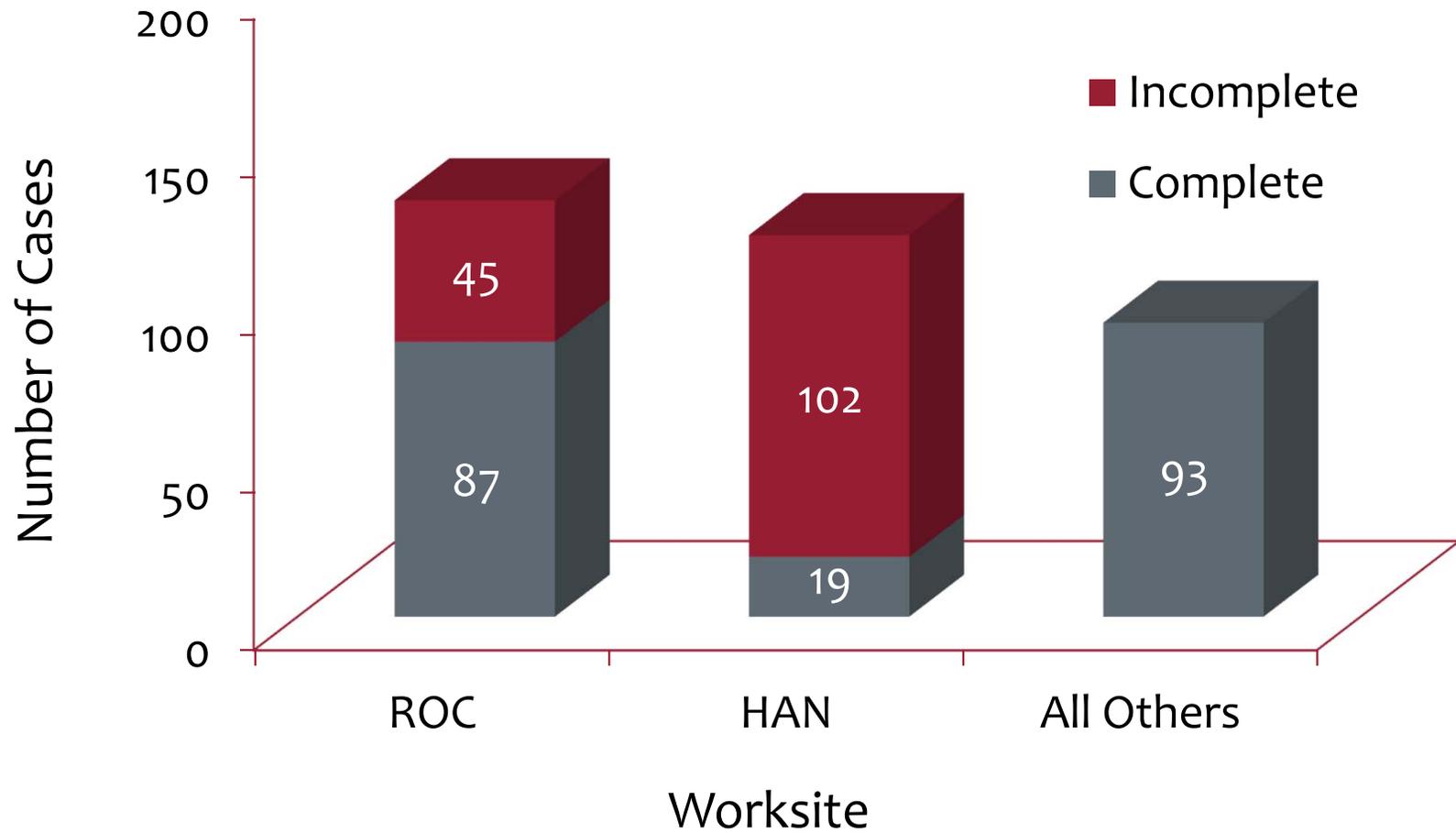
2008 – 2016 Progress by Records



** Including living cases*

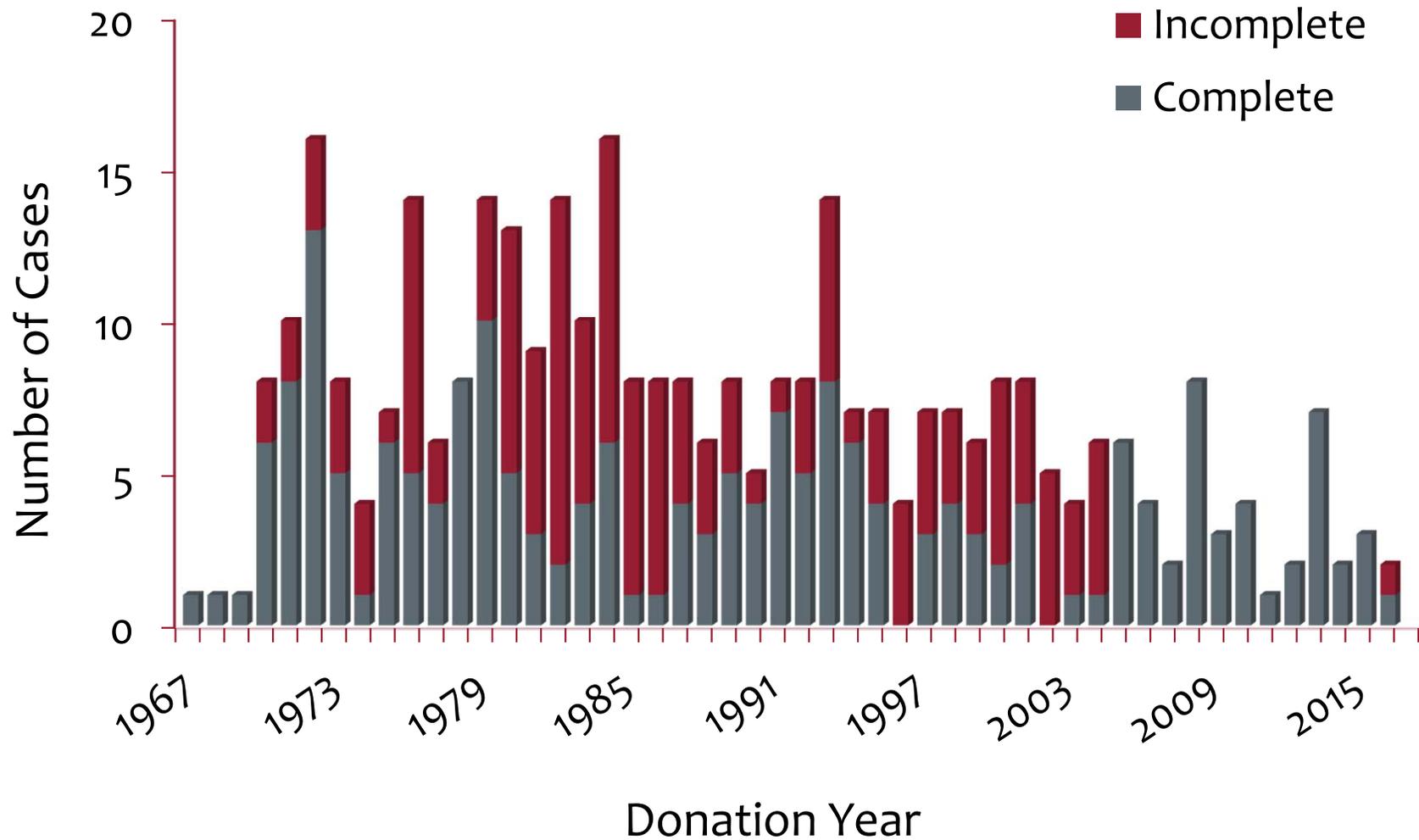


Status by Site



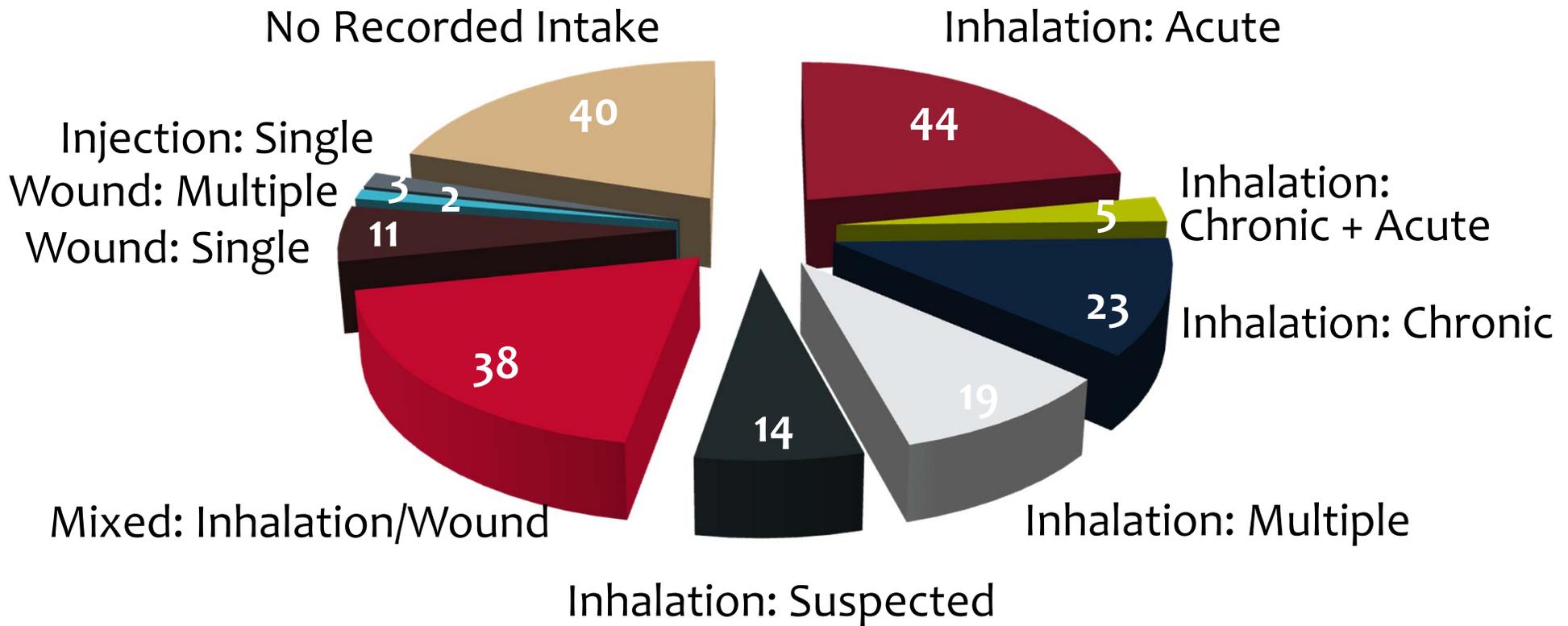


Status by Donation Year

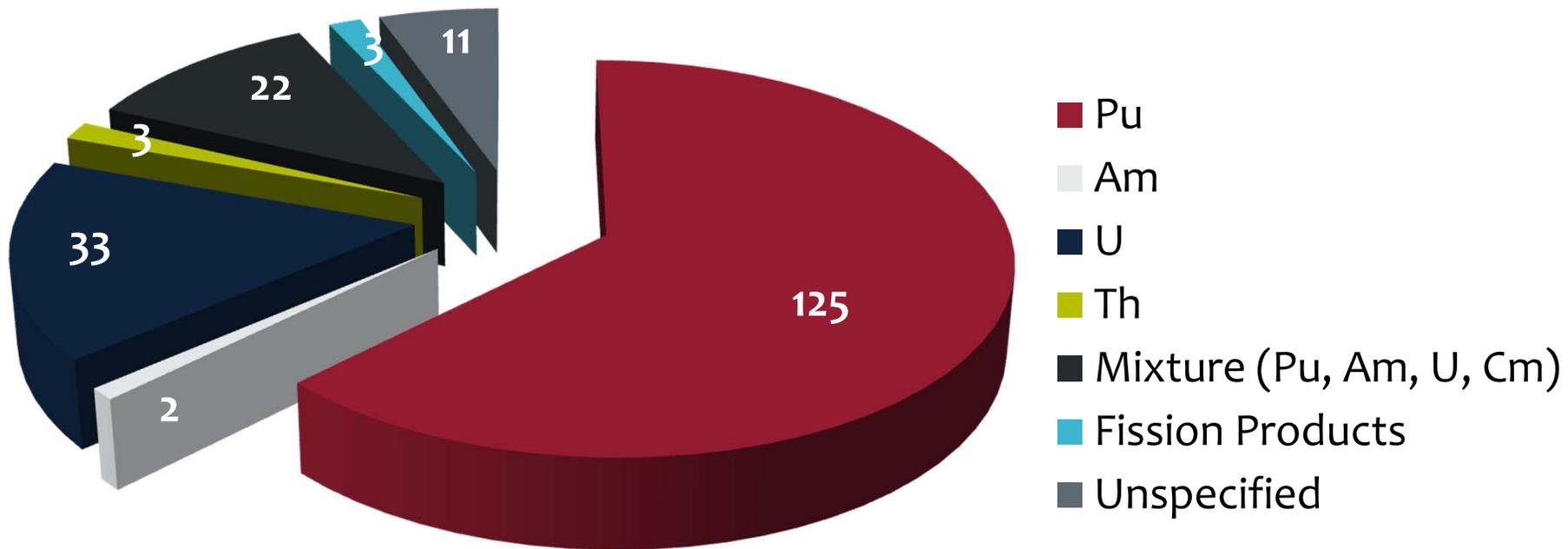




Completed Cases by Intake Type

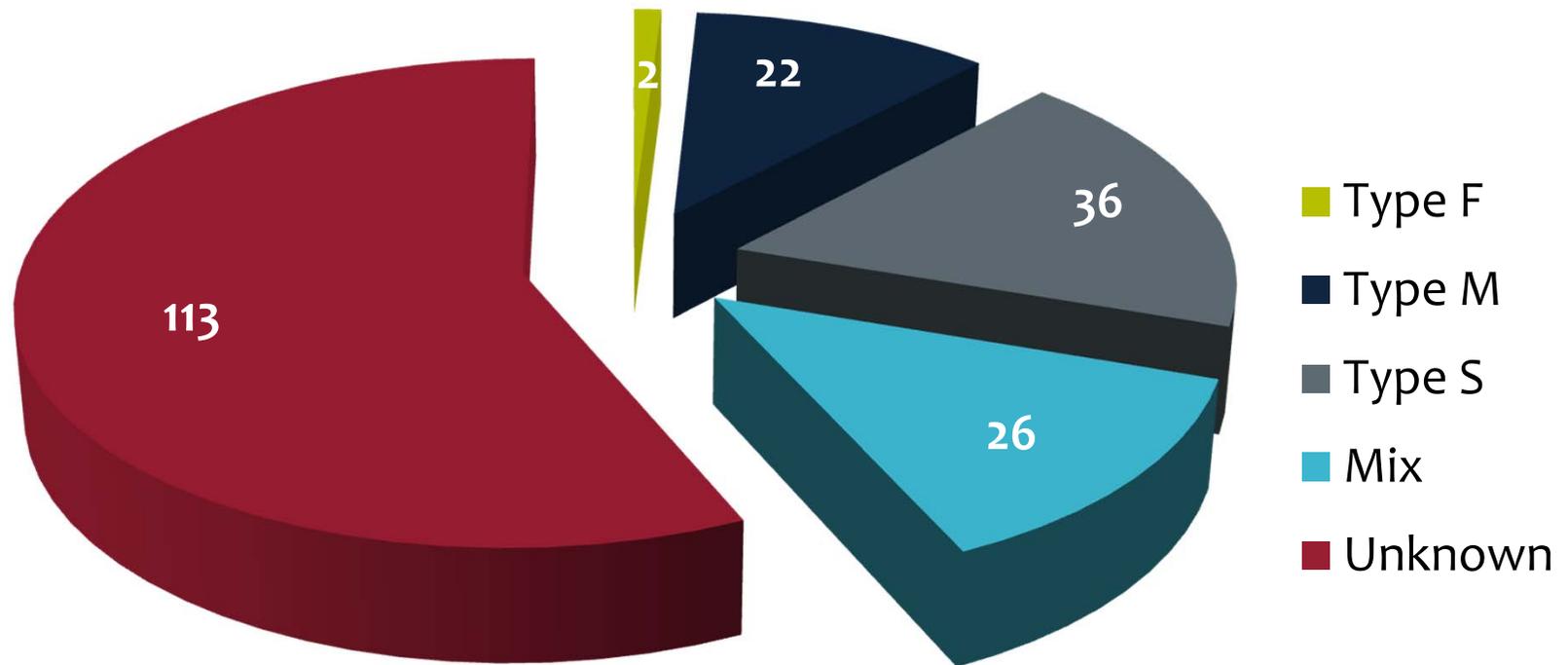


Completed Cases by Primary Radionuclide





Completed Cases by Solubility Class





Study Groups: HP Database Status

Study	Deceased	Living	HP Complete
Soluble plutonium (UPPU)	11	1	11
Refractory PuO ₂ inhalation	21	1	16
Plutonium in wound	12	2	13
²³⁸ Pu biokinetics	8	1	8
Decorporation therapy	13	1	12
Environmental uranium	5	–	5





Thank you!