



2017 Scientific Advisory Committee Meeting
Red Lion Hanford House, Richland, WA
August 25 – 26, 2017

USTUR Health Physics Database

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*“Learning from Plutonium
and Uranium Workers”*

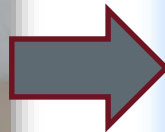




Objective

Easily searchable, standardized records of:

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



United States
Transuranium and Uranium Registries

Case No:

Intake Type:
Contaminant(s):

Medical Rad Chem Health Physics Clinical Pathology Next of Kin

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

Urine Feces
Blood Skeleton
Lung Liver
Wound WBC
All Data
Enter Data

Intake Type:
Contaminant(s):
ICRP 68 Type:
Chemical Form:
HP Entered:

Quick

Notes:





Priorities: 2016



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

- 'New' donations: *highest priority*
- 'Old' donations: worksite and scientific interest





Priorities: 2017



| Donation Type | Deceased | Living | Year of Birth |
|---------------|----------|--------|---------------|
| Whole-body | 44 | 7 | 1924 – 1951 |
| Partial-body | 306 | 34 | 1920 – 1971 |
| Total | 350 | 41 | |

- ‘New’ donations: *highest priority*
- Living Registrant cases: *helps planning autopsy*





2017 Progress



- 4 'new' donations
0410 & 0421
0674
0688
- 3 'old' donations
0161, 0183 & 0194
- 14 living Registrants: 7 WB & 7 PB

all WB completed !!!





2017 Status by Case

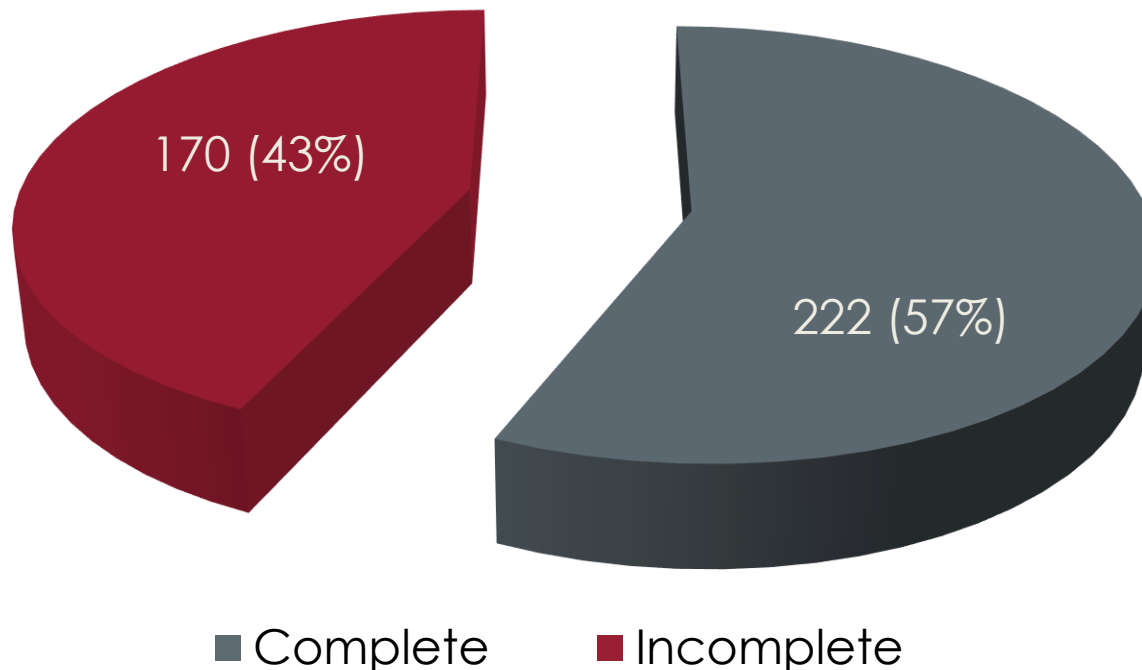
As of August 18, 2017, 222 of 392 Registrant cases completed

Deceased: 59%

- 44 whole-body
- 161 partial-body

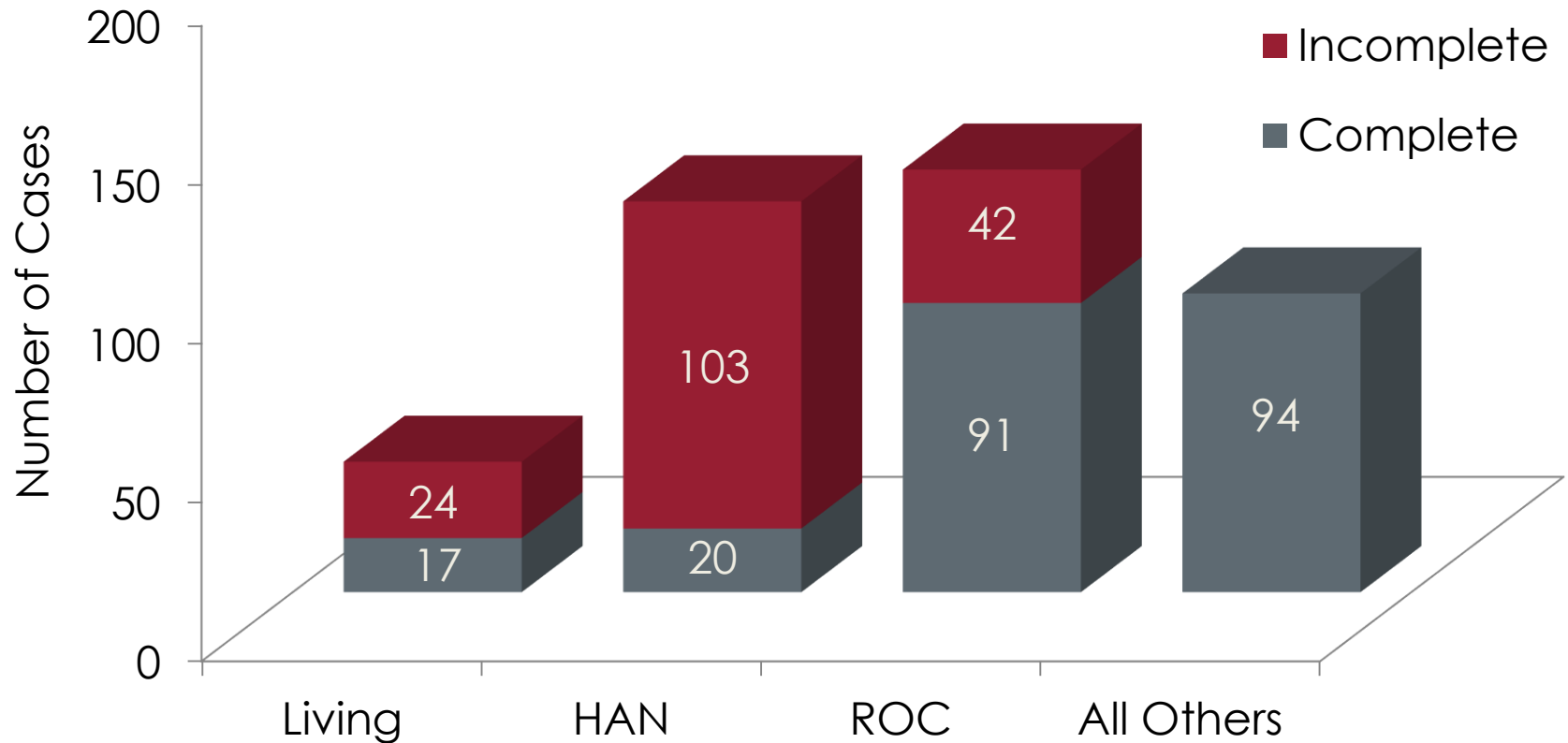
Living: 41%

- 7 whole-body
- 10 partial-body



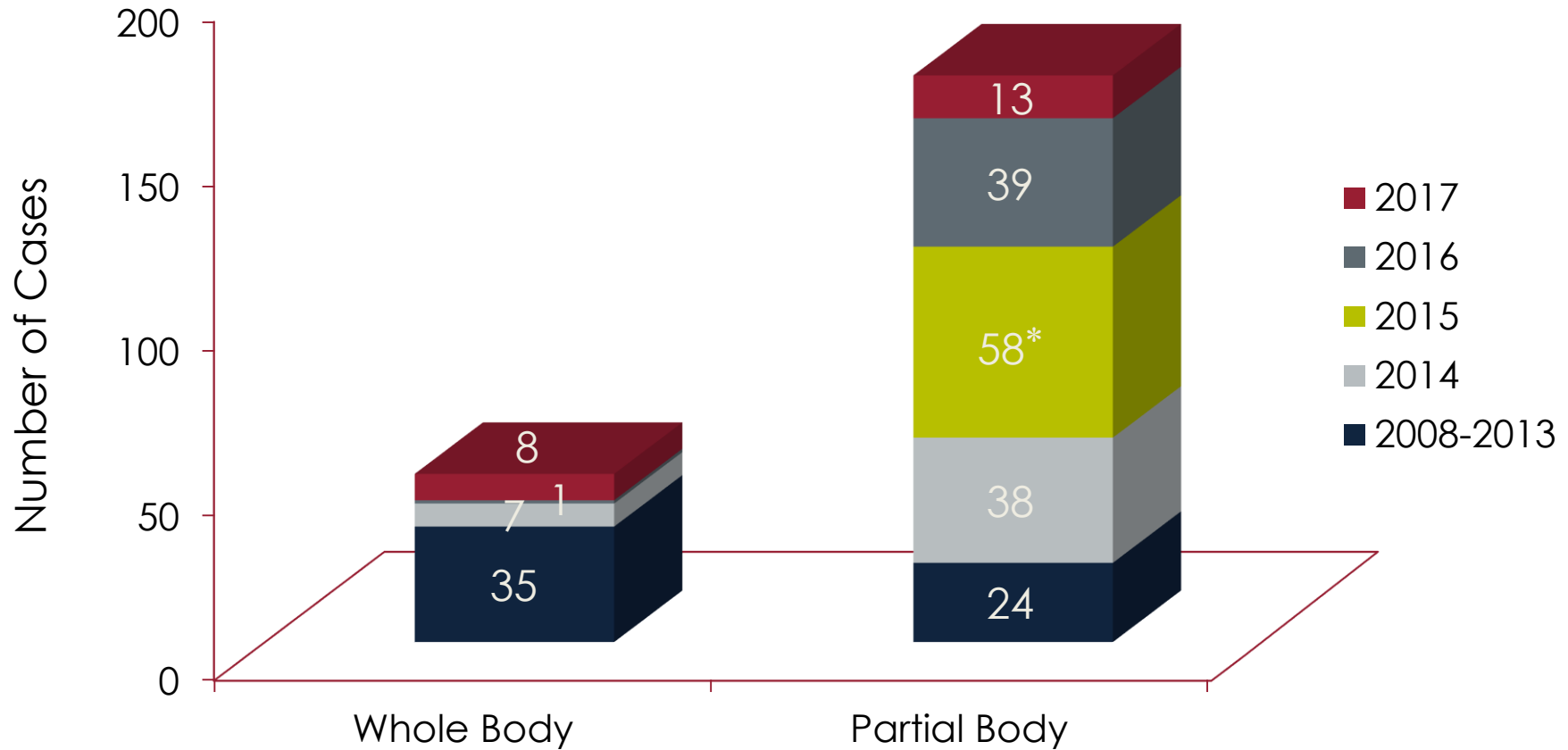


2017 Status by Worksite





2008 – 2017 Progress by Case

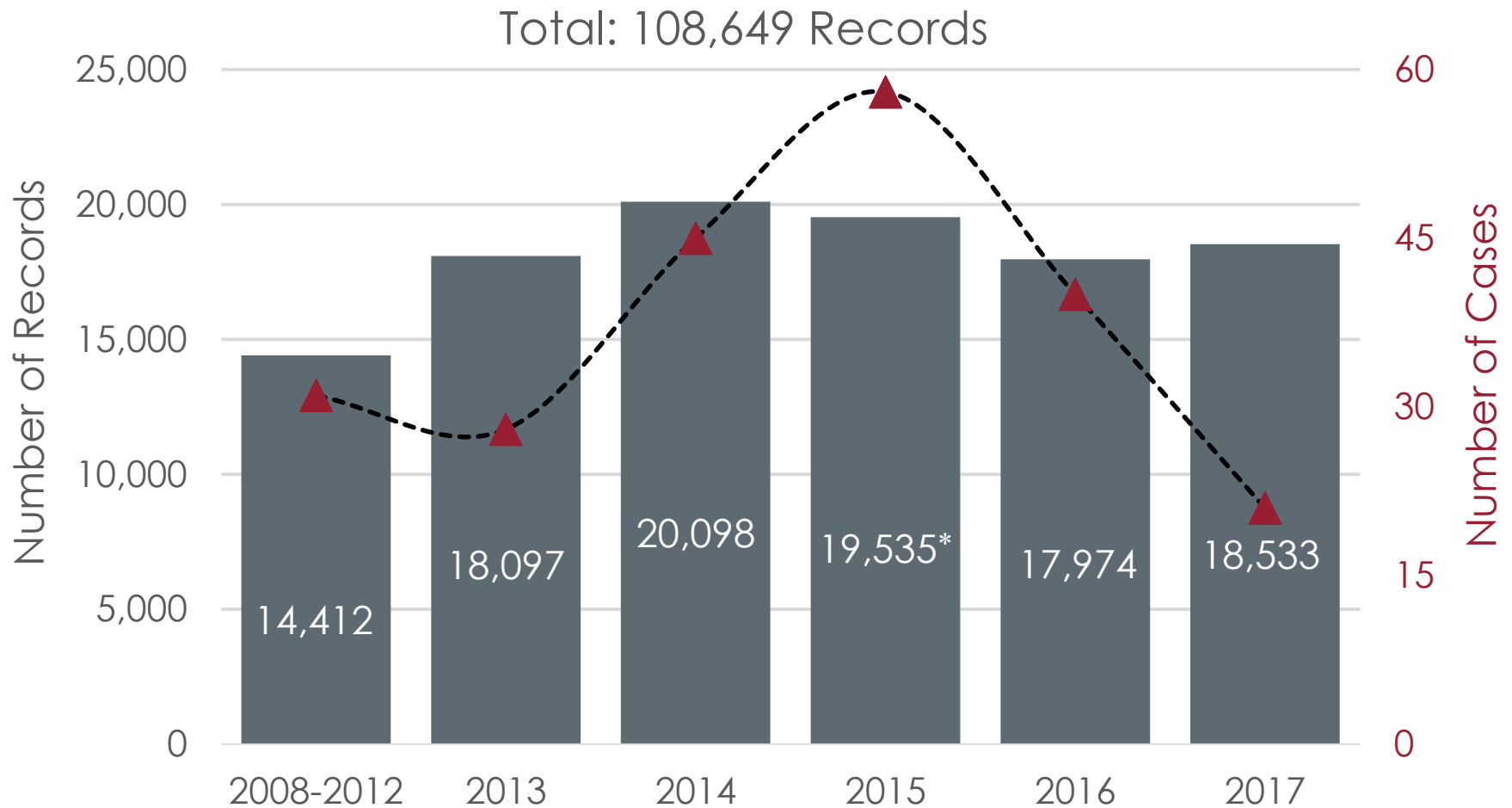


** Including one special study case*





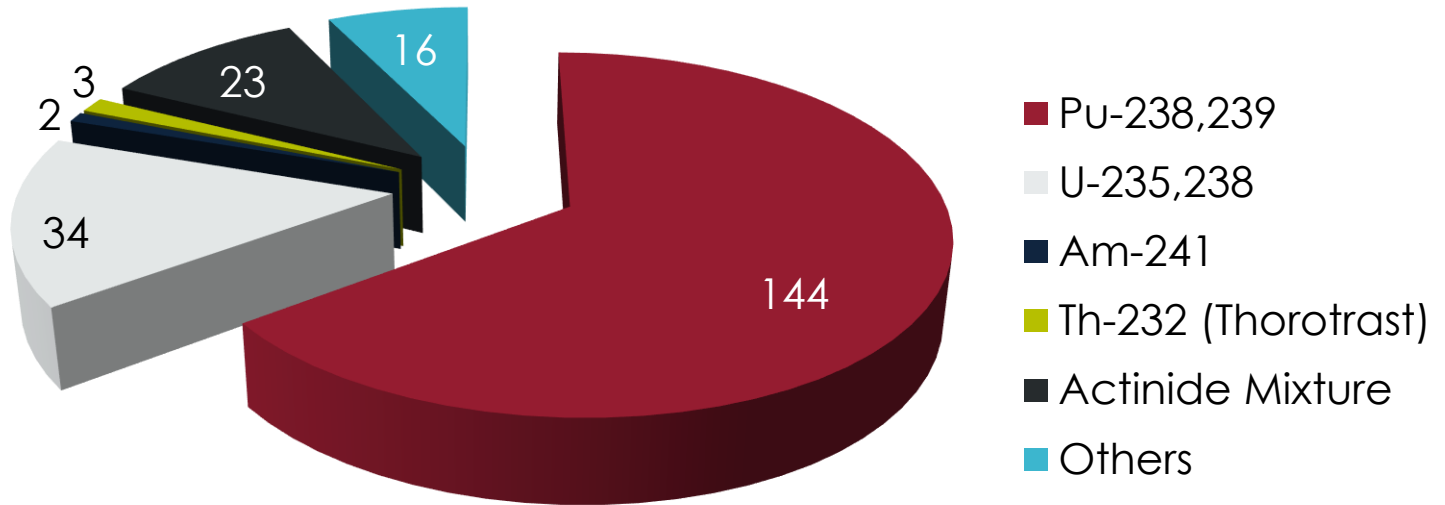
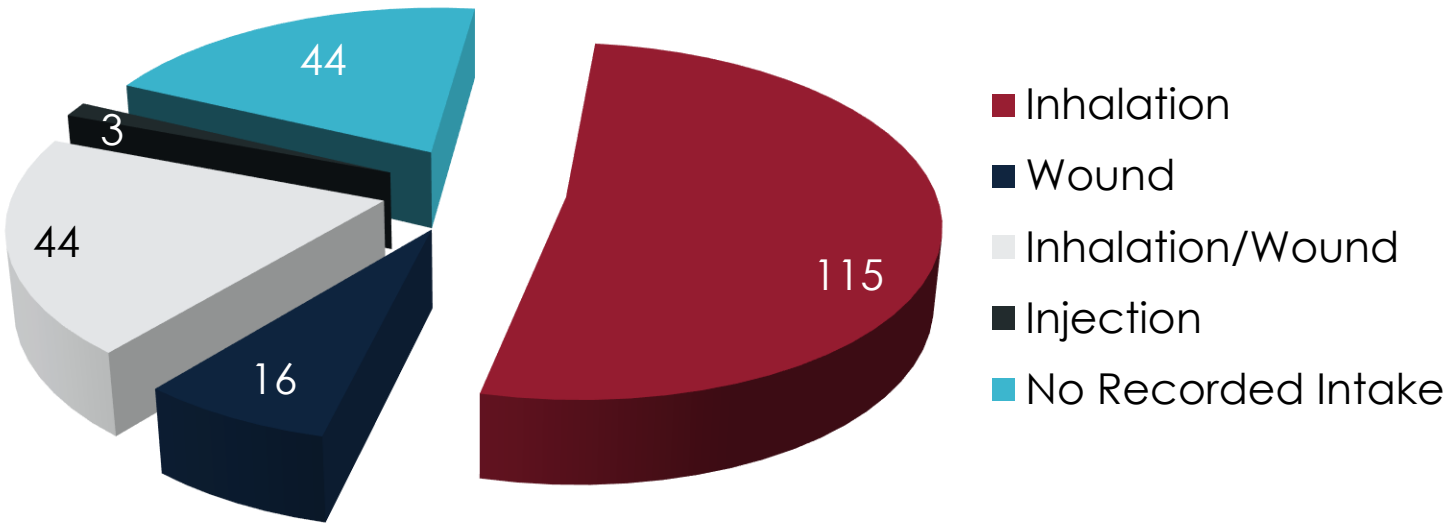
2008 – 2017 Progress by Records



** Including one special study case*



Completed Cases: Intake Route & Nuclide





Research Projects

| Study | Deceased | Living | HP Complete |
|--|----------|--------|-------------|
| Soluble plutonium (UPPU) | 11 | 2 | 13 |
| Refractory PuO ₂ inhalation | 21 | 1 | 18 |
| Plutonium in wound | 12 | 2 | 14 |
| ²³⁸ Pu biokinetics | 9 | 2 | 11 |
| Decorporation therapy | 15 | 2 | 14 |
| Environmental uranium | 5 | – | 5 |





SAC2017, 3:00 pm

USTUR Research: Land of Opportunity

—EURADOS—▶

Working Group 7 Annual Meeting
Karlsruhe Institute of Technology
Karlsruhe, Germany
Feb 27 – March 3, 2017



M. Avtandilashvili, SAC 2017: Health Physics Database

