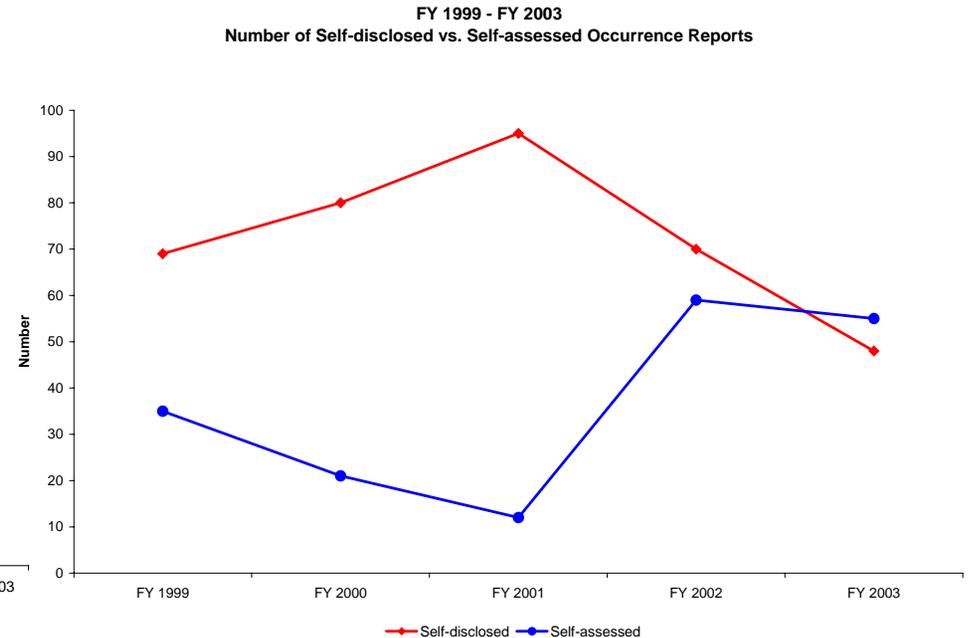
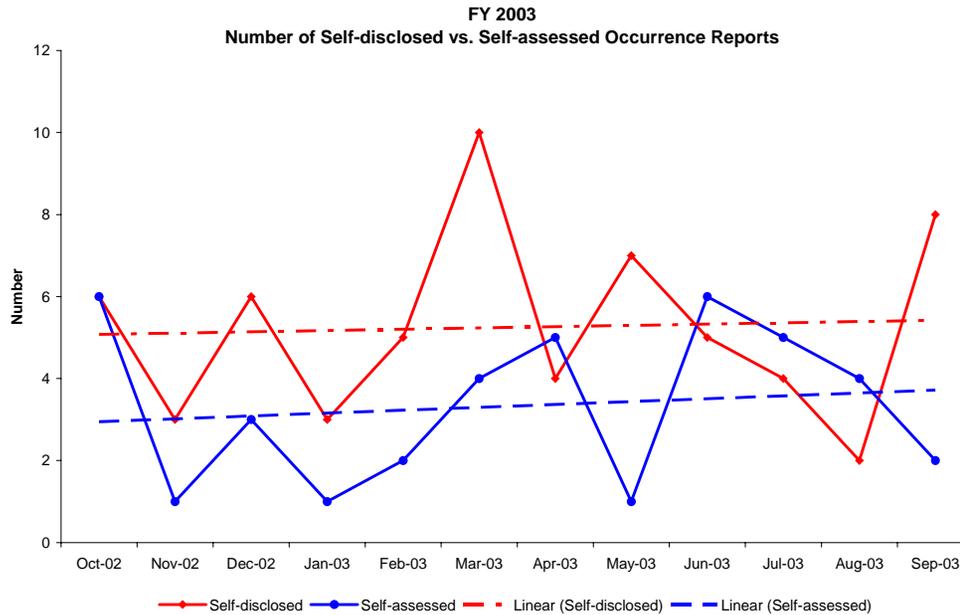


Occurrence Report Source Trends Self-assessing vs. Self-disclosing



Analysis

- Based on a review of the last 12 months of information, we are seeing the continuance of a trend that indicates self-assessment activities or self-identification processes have become the prevailing source for our occurrences. FY 2003 data shows that 54% of occurrences were found through self-assessing activities or self-identifying processes.
- A multi-year view of occurrence reports based upon the self-assessed/identified issues versus self-disclosed event-driven issues provides evidence that the Laboratory's efforts to instill effective self-assessment processes and tools – though still needing improvement – are gaining ground and yielding results.

Issues

- Continuing our efforts to improve self-assessment is crucial to make the trend toward self-identification of our problems become a routine activity.

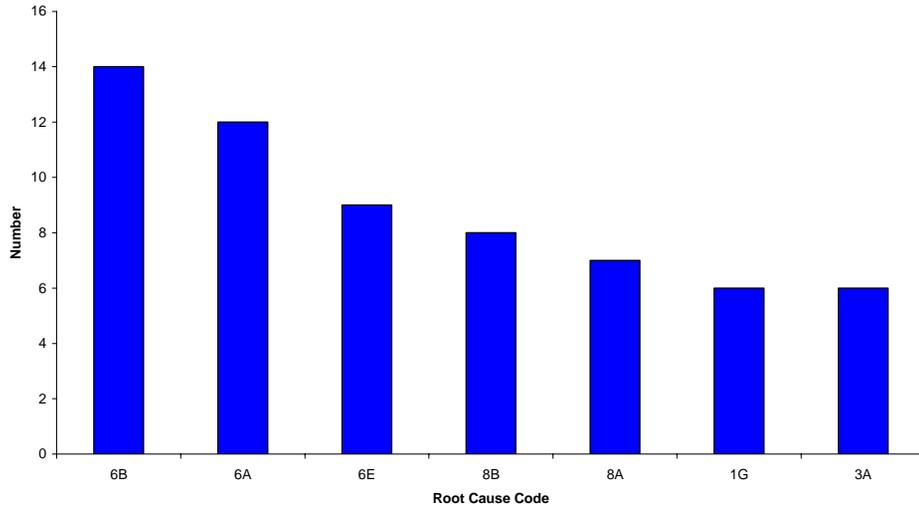
Definitions

Self-assessed or self-identified occurrences are those where a person has discovered an item through the use of an established system or barrier such as a self-assessment, radiation survey, or monitoring equipment.

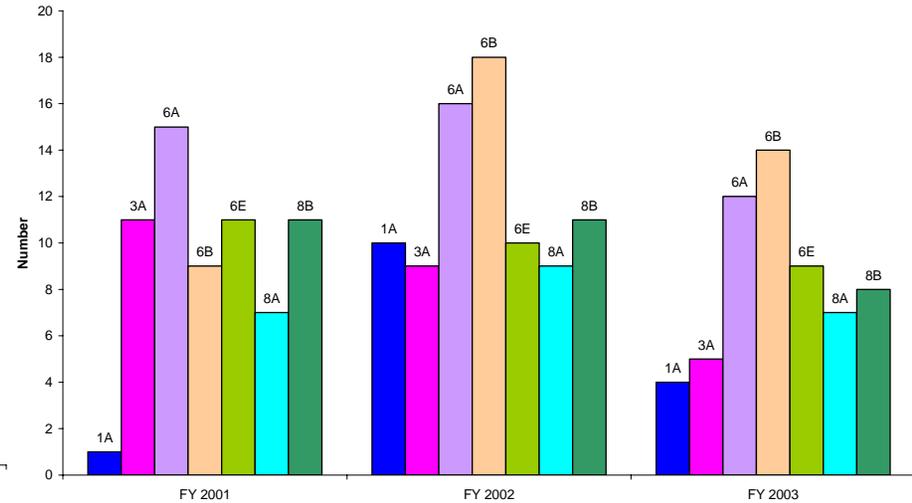
Self-disclosed occurrences are those where a person has discovered an item from an event such as an accident where the established systems or barriers failed.

Root Causes from Occurrence Reports

FY 2003
Top 7 Root Causes



FY 2001 to FY 2003
Top Root Causes from Occurrence Reports



Analysis

- The top three root causes for occurrences in FY 2003 fall within the realm of management concerns and issues. Situations involving work organization/planning deficiencies; inadequate administrative controls; and policies that are not adequately defined, disseminated, or enforced point to a variable understanding among our organizations concerning improvements that must be made in the management controls necessary to clearly define line management expectations for work activities and the controls that regulate how work is performed.
- Pertinent to the FY 2001-2003 trends, these same or related management control issues consistently manifest themselves and indicate that this is not a new area for improvement, nor have we made significant progress in alleviating the associated problems.

Root Cause Codes

1A – Defective or Failed Part

1B – Defective or Failed Material

1G – End of Life Failure

3A – Inattention to Detail

5B – Insufficient Practice or Hands-on Experience

5E – Inadequate Presentation or Materials

6A – Inadequate Administrative Control

6B – Work Organization/Planning Deficiency

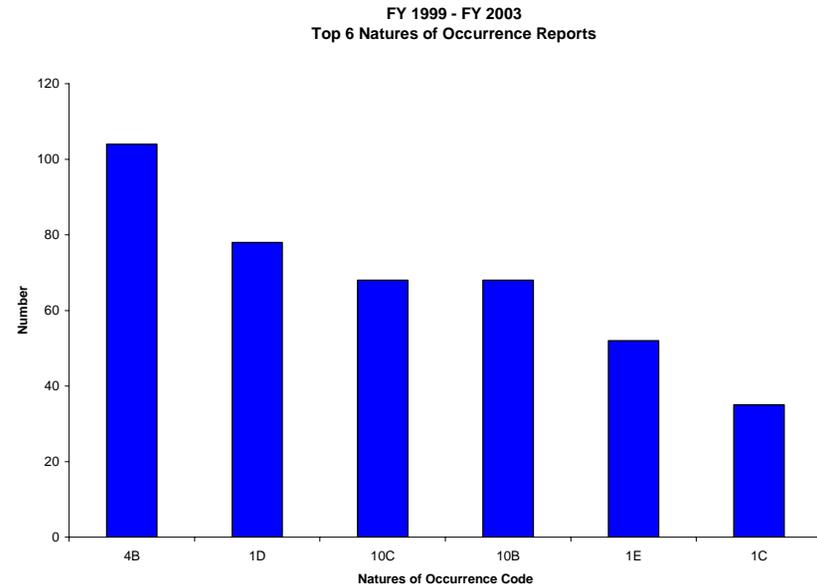
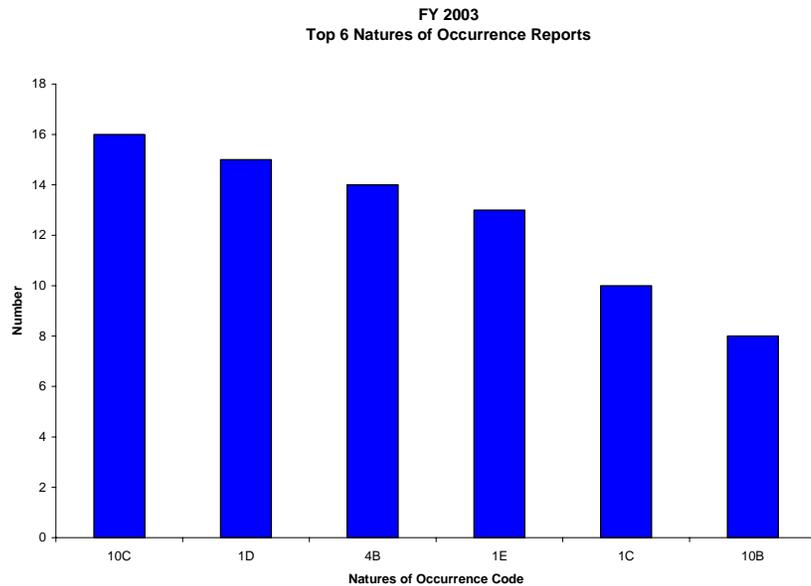
6C – Inadequate Supervision

6E – Policy Not Adequately Defined/Disseminated/Enforced

8A – Legacy Contamination

8B – Source Unknown

Natures of Occurrence Reports



Analysis

- The reporting of problems in the category of Potential Concerns continues to increase. This category is the most encompassing for lower-level issues that, in many cases, have no actual adverse result, yet present situations where staff has discerned a need for additional analysis because of potential impacts. This reinforces the position that the culture for self-disclosure at ORNL continues to improve. Laboratory-wide reporting of Potential Concerns increased by 69% between FY 1999 and FY 2003.

Issues

- Factors including strong management reinforcement for an effective Laboratory-wide self-assessment effort coupled with an open reporting environment have the potential to cause a steadily increasing number of our problems to be found through our internal assessment processes while the significance of these identified problems steadily decreases.

Natures of Occurrence Reports

1C–Safety Status Degradation

1D–Loss of Control of Radioactive Material/Spread of Radioactive Contamination

1E–Safety Structure/System/Component Degradation

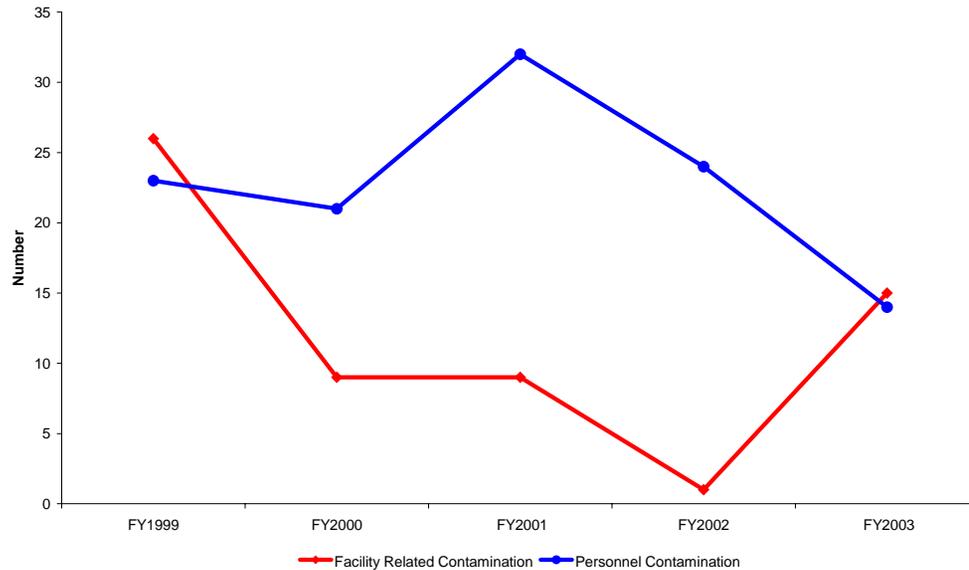
4B–Personnel Contamination

10B–Near Miss Occurrences

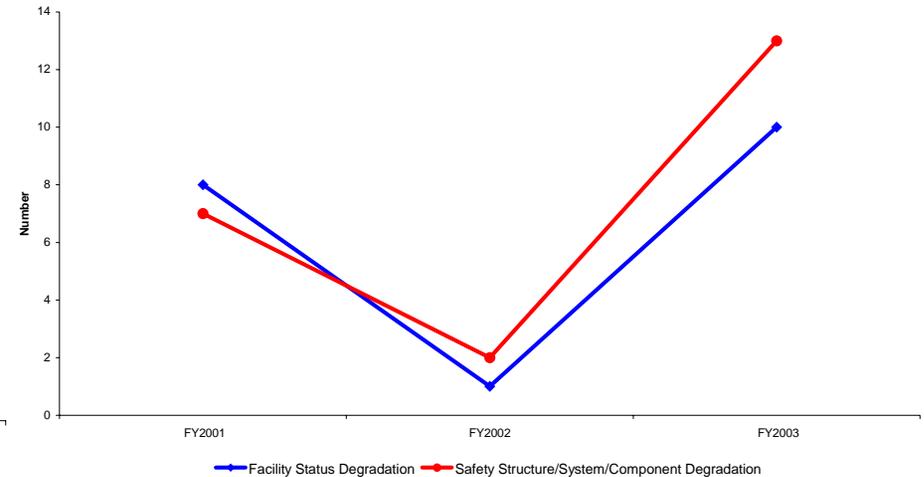
10C–Potential Concerns/Issues

Contamination Issues from Occurrence Reports Associated with Facility-Related Factors

Facility and Personnel Contamination FY 2001 to FY 2003



Facility and Safety Structure Degradation FY 2001 to FY 2003



Analysis

- Based on a three-year perspective, our personnel contamination issues continued to decline in numbers. There has been a 40% decline in personnel contamination incidents from FY 1999 – 2003.
- During the FY 2001 – 2003 time frame, facility-related contaminations also declined until the end of FY 2002, after which a steep increase is noted. During this period, we also saw a sharp increase in facility and safety structure degradation issues. There is a direct relation to the increase in facility-related contaminations and facility condition issues. Increasing numbers of facility-related surveys were conducted during FY 2002 and 2003 in support of excess space deactivation and building removal. These activities led to the discovery of a number of legacy issues that make up a part of the increase in facility-based occurrences. In addition, this same time period included significant strengthening of facility-based self-assessment efforts in the new Non-reactor Nuclear Facility and the Research Reactors divisions to more fully characterize facility condition issues and associated risk factors. In the short term, our efforts to deactivate excess space and to look at our facilities more closely have combined to increase our facility contamination occurrences.