

IMPLEMENTATION OF A SCORECARD SYSTEM BASED ON LAB VALIDATIONS AND POST-VALIDATION FOLLOW-UP

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OBJECTIVE:

To be able to convey measurable performance to Principal Investigators (PI) and the chairs of the departments based on Environmental Health and Safety Office (EHSO) conducted lab inspection and post inspection follow-ups.

METHODS/IMPLEMENTATION:

1. Each PI/designee completes annual laboratory self-inspections of their labs.
2. Independent laboratory inspections (validation) are conducted by EHSO.
3. Within 48 hours, EHSO provides a comprehensive report of the inspection.
4. EHSO completes a follow-up inspection (post-validation) 7-10 days later.
5. EHSO issues a scorecard that outlines compliance for each section of the inspection form, and post-inspection.
6. Once all lab validations in a particular department are complete, a scorecard is given to the department chair that lists the scores of the individual PIs in that department and overall score for the department.

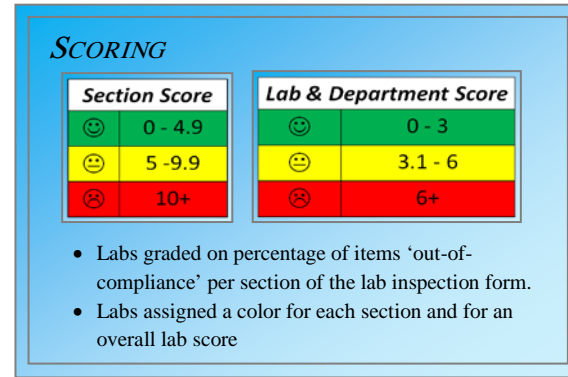
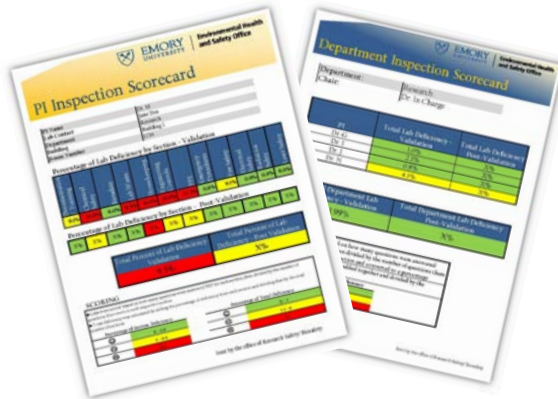
SCORING:

- For simplicity, scoring is coded by color and emoticon.
- Scores are based on the percentages of items that are out-of-compliance.
- The PI receives a score for each section as well as an overall score for the validation and post-validation inspection.
- The department chair receives a score for each lab and an overall department score.

$$\text{Section Score} = \frac{\eta_{\text{Items Out of Compliance in Section}}}{\eta_{\text{Items in Section}}} \times 100$$

$$\text{Lab Score} = \frac{\sum \text{Section Scores}}{12}$$

$$\text{Department Score} = \frac{\sum \text{Lab Scores}}{\eta_{\text{Labs in the Department Inspected}}}$$



CONCLUSIONS:

- The implementation of our scorecard system has been effective in raising awareness of lab safety and has allowed for the next step to be taken in fostering a culture of safety on campus.
- The cooperation of each PI, the investment made by the department chairs, and EHSO's dedication to the project was integral in moving forward with our lab validation program.

MOVING FORWARD:

- A campus wide program will be implemented in Fiscal Year 2013.
- Inspection form will be revised and edits will be made to the scorecard reflecting the changes.
- Will be incorporating sustainability items (i.e., green labs).
- Top 2-3 items will be targeted for "top priority" status and will be aggressively pursued (example: campaign to dispose of legacy chemicals).
- Automatic data entry will decrease amount of time to generate a scorecard.

RESULTS/DISCUSSION:

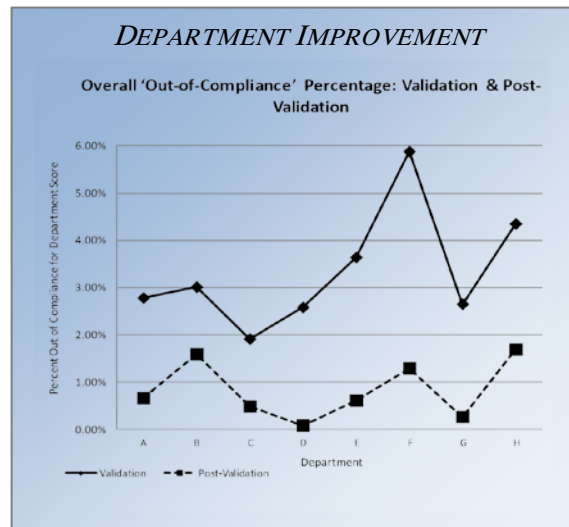
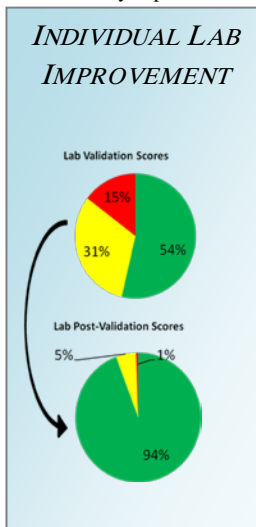
Any PI at the University who intends to perform research must complete their annual lab self-inspection and will be issued a scorecard to illustrate their compliance within EHSO's lab validation program. Each department chair will also receive a scorecard that outlines how every PI within their respective department is complying with the safety expectations.

SUMMARY OF RESULTS:

- With the support of the department chairs, the scorecard program has also gained support from the majority of the research community that was beta-tested.
- The beta-test showed an overwhelming improvement of most line items in the inspections among nearly every lab.

CHALLENGES:

- Being the first attempt, we faced the challenge of tying in the data from our iPad inspections into a logical, coherent and aesthetically pleasing presentation.
- Having to manually enter inspection data into a spreadsheet as well as into the scorecard format.



BENEFITS & OUTCOMES

- Allows EHSO to identify gaps in the inspection program
- Provides transparency between PIs, Dept. Chairs and EHSO
- Allows all involved to prioritize items of greatest need
- Identifies areas in need of improvement, but also identifies areas of the greatest strength within the lab
- Promotes cooperation between EHSO and the research community and continues in the effort to create a cultural change in the field of safety