

INCIDENT REPORT — CLOSE CALL, MD HALL (JUL 2015)

A researcher collaborating with a non-JHU research group received instructions to treat a material to produce a particular surface chemistry. It happened that the description of the resulting surface coating was the same as the name of a highly dangerous chemical. The researcher concluded that the instruction was to treat the surface with the mentioned chemical, though the accepted procedure would have been to use a different and much safer chemical. The misunderstanding led to ordering and delivery of the wrong chemicals. Fortunately, the researcher checked with the principal investigator immediately upon arrival of the chemicals because of the plethora of hazard warnings on the package. Because no one in the lab was experienced with this particular class of chemicals, the PI stopped the work.

LESSONS LEARNED

- When collaborating with others, whether in your own research group, another JHU lab, or off-site partners, **do not use shorthand terms for procedures.** Describe the reagents and steps to be used in detail.
- **Always exchange written experimental protocols** to verify that the procedure you will carry out is the one the collaborator intended.
- If there is any question about proper procedure or the safety of a particular procedure, **check with the principal investigator before proceeding.**

DISCUSSION QUESTIONS

1. When collaborating in our group, do we always communicate exactly what is to be done, especially with researchers who are not experienced in the procedure? How could this be improved?
2. Do we have clear criteria to define when the principal investigator must be consulted? If not, what should those criteria be?
3. Do we always create written experimental protocols (either for the lab or in our lab notebook for ourselves) before conducting a procedure? What benefits would this bring? How complex should a procedure be before a written protocol is considered necessary?