Sent: Mon, Jan 6, 2014 11:58 am
Subject: Lessons Learned: Methanol is still flammable and the Rainbow experiment is still unsafe

Lessons Learned: I'm sure you all have already heard about the incident at the NYC school involving methanol and the "rainbow" demonstration. A student was severely burned, another student was burned badly, all the students watched while their classmate was on fire and the teacher has been removed from the classroom for now. Newsday only gave an outline of the incident; other NYC news outlets reported what the students described as the steps the teacher took during the demonstration and what happened after.

I've lost count of the number of "lessons learned" I've sent out about this and similar experiments. Just before the winter break, I sent out an email and included the NSTA guidelines. Days later, the federal Chemical Safety Board (CSB) sent out an email with a video of a previous accident and the student describing how it has changed her life (I forwarded this to the group). Did you watch it? Did you share it with every other science teacher in your school?

Now I need a "lessons learned" from all of you!

The American Chemical Society (ACS) Safety & Health groups that I belong to want to reach out to science teachers and provide safety information about this experiment and other lab safety issues. I also want to be able to reach more science teachers with these emails.

PLEASE - send me your suggestions on how to reach more teachers! What groups are you in? What resources do you go to for your labs? What do you think will work to help spread the message?

Thanks! Here's to a safe new year in all of our local schools and beyond!

Please forward this email to all science teachers!

Resources:

NY Post article with descriptions: http://nypost.com/2014/01/02/students-injured-in-high-school-science-class-blast/

UK article: http://www.dailymail.co.uk/news/article-2532907/Student-16-suffers-second-degree-burns-face-neck-science-teachers-chemistry-experiment-goes-horribly-wrong.html

NY Times article:SCHOOL EXPERIMENT THAT BURNED BOY WAS FOCUS OF FEDERAL WARNING
http://www.nytimes.com/2014/01/04/nyregion/school-experiment-that-burned-boy-was-focus-of-federal-warning.html?ref=todayspaper&_r=0#h[]
Tags: us_NY, laboratory, follow-up, injury, methanol

Only weeks before a chemistry experiment sent a plume of fire across a Manhattan high school science lab, engulfing two students and leaving one with life-threatening burns, a federal safety agency issued a video warning of the dangers of the very same experiment, a common one across the country.
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The agency, the United States Chemical Safety Board, distributed the video warning to its 60,000 subscribers, a spokeswoman, Hillary Cohen, said Friday, but it had no sure way to reach individual teachers at schools like Beacon High School on the Upper West Side. There on Thursday, Anna Poole, a young science teacher known for safety consciousness, used methanol as an accelerant to burn dishes of different minerals in the chemistry demonstration known as the Rainbow.

With about 30 students watching from their desks, a snakelike flame tore through the air, missing the students closest to the teacher's desk, but enveloping Alonzo Yanes, 16, searing and melting the skin on his face and body, according to witnesses. He was in critical condition on Fridayin the burn unit of NewYork-Presbyterian Hospital/Weill Cornell Medical Center, Myrna Manners, a hospital spokeswoman, said.

CSB: **Statement from CSB Chairperson Rafael Moure-Eraso on Yesterday's High School Laboratory Fire in New York City**

I was distressed to learn once again of a serious high school laboratory accident, this one occurring yesterday at a New York City High School. According to media reports, a flash fire occurred during a demonstration in the high school's laboratory resulting in injuries to two 10th grade students, one severely.

This accident is all too similar to the one we highlighted in a recent video safety message released by the CSB that specifically focused on potential dangers in high school chemistry laboratories. The CSB's safety message entitled "After the Rainbow," features accident survivor Calais Weber in her own words describing how at age 15 she was burned over 40 per cent of her body during a chemistry demonstration performed by her teacher at a prestigious boarding school she attended in Ohio. That accident occurred on January 23, 2006. Our chemical investigation screening process regrettably regularly reports similar accidents.

LINK TO CSB SAFETY MESSAGE: http://www.csb.gov/videos/

Though information at this stage is very preliminary, media reports indicate the accident that occurred yesterday in Manhattan may have been similar to the type of demonstration that critically injured Ms. Weber in that it attempted to show how chemicals react in different ways giving off different colors. . The demonstration in the CSB video showed the use of highly flammable methanol to depict how various mineral salts produce different color flames when burned.

The CSB believes that accidents in high school laboratories occur with alarming frequency. Yesterday's incident is yet another example of a preventable incident and a reminder of the need for exacting safety measures to protect students and school property. As Calais states in the safety message, her accident should never have occurred, and that with better attention to good safety practices, similar accidents can also be avoided. She says, "It feels with this type of injury that you've had so much taken away from you unnecessarily and to keep reading about other people who have had very similar experiences, it's tragic and shouldn't happen."

Safety alert from the National Science Teachers Association:
http://www.methanol.org/Health-And-Safety/Safety-Resources/Health---Safety/NSTA-Safe-Handling-of-Alcohol-in-the-Laboratory.aspx

Kim Gates
Laboratory Safety Specialist
Environmental Health & Safety
Stony Brook University
Stony Brook, NY 11794-6200
Kim.Gates@stonybrook.edu

631-632-3032
FAX: 631-632-9683
EH&S Web site: http://www.stonybrook.edu/ehs/lab/