Near-Miss/Incident Learning Experience Report

Our goal is to learn from each other to help create a safe, productive research environment for everyone so we can all do world-class research and go home with our eyes, skin, and lungs intact.

Please provide information about the incident so we can all learn from it. This is not punitive – do not include names or room numbers. When completed, e-mail this form to jasbury@psu.edu. The person sending the report does not need to be the person involved in the incident. The completed form will be posted on the departmental Angel Safety page. No personal information will be included.

1) Describe what happened.

A Bunsen burner was left on inside a bacterial containment hood near a plastic handled inoculating loop and a beaker with ethanol. The burner was so close to the inoculating loop handle that it began to burn and melt the handle. A picture is shown below from immediately after the flame was shut off.

2) Describe the root cause that led to the near-miss/incident.

The root cause of the incident was two-fold. First forgetting to turn off the Bunsen burner and second was placing the burner too close to a flammable object and an extremely flammable solvent.

3) Include pictures of the scene that would help communicate what happened and what were the root causes.

4) What makes this a near miss or learning experience?

This could have easily resulted in a fire even if the ethanol wasn’t placed so close to the flame but this factor just compounded the danger. The burning/melting handle did not fall into the ethanol beaker but easily could have. A large flame could quite easily catch the containment hood filters on fire. A hood fire could have spread to the room and the building.

5) Describe what actions might have prevented this near-miss/incident for future reference.
Ensuring that objects are not placed near a Bunsen burner when it is on. Remembering to turn off the Bunsen burner when finished using it. Potentially having a different Bunsen burner design that requires one to be present for it to be on. Flammable solvents like ethanol should not be placed near open flames even when they are used together for procedures. An alternate method should be devised.

Thank-you for helping us make our laboratories a safer and more productive research environment. Please send this completed form to jasbury@psu.edu. The person sending the report does not need to be the person involved in the incident. The completed form will be posted on the Angel Safety page. Remember, keep it anonymous. No personal information will be included with your report.