

STANDARD DEVIATIONS: Wise Up or Clean Up

Greetings,

Are you prepared to manage a major spill? Do you have a spill kit? Do you have a plan? Of course you are and of course you do. We're in the business of managing exposures and being aware of risk. Laboratory preparedness is all about safety and biohazard containment.

Maybe the lessons we've learned and the mitigations we practice should be applied to the real world.

Major spills are dangerous. In a pandemic, a spike in cases reflects a spill of pathogen. We may not think about it the same way but the situation is identical. Our response strategies need to handle the mess and mitigate the risks of exposure. We need to protect and make people aware of the incident, protect the environment, neutralize the threat, prevent any spread of threat, clean the spill thoroughly, and document the situation in order to learn from it and prevent future accidents.

Utah made national news this week when an outbreak at Corner Canyon High School (Draper) was made public. Dozens of positive cases have forced the school to close doors and move to remote learning protocols (<https://www.nytimes.com/2020/10/18/us/coronavirus-schools-reopening-outbreak.html>) Does it qualify as a spill? Is it being cleaned up properly? Did you hear about it?



When these kinds of accidents happen we should use our spill kit knowledge to manage the spill of pathogen. Think about the steps we follow in the lab and the way those steps apply to this school outbreak:

- Have we prevented the spread of this spill, and made sure everyone involved is safe?
- Are we alerting everyone to the fact that a spill has occurred?
- Are we assessing the extent and nature of the spill to make the best decision about response?
- Are we getting the affected persons the immediate medical attention that is needed?
- Are we responding to the pathogen correctly? Do we need help?
- Have we evacuated the area and kept others informed and away? Are we using adequate signage?
- Do we have a spill kit (PPE, disinfectants, sufficient supplies)?
- Are we making sure to cover the entire spill?
- Are we using enough time to make sure that the pathogen is inactivated?
- Are we cleaning up after ourselves?
- Are we documenting the spill, the people affected, the mitigation and response in order to prevent the spill from re-occurring?

When we look back at this particular spill, some missteps will be apparent.

- The school chose to open even though case numbers were elevated and the guidance was calling for delay.
- Most parents opted for in-person school. The district seems to have made few adjustments to accommodate social distancing in classrooms.
- The district also did not make coronavirus testing part of its reopening plan, leaving those decisions to families.
- Canyons said it would adhere to the state health department's standard for closing schools. But when Corner Canyon reached 15 cases the school board decided to ignore the guidance. They chose to make 2% positivity a threshold for closure. More than 3% (77 cases) tested positive in this report.
- Many parents in the district do not support any virus restrictions. Some Corner Canyon parents held to a "mom code" – not to get their children tested for the virus even if they became ill, to avoid adding to the school's case count and contributing to it being shut down.

The unplanned release of pathogen in this school certainly resembles a major lab spill. It also seems that this spill is caused by human errors and could have been avoided with SOPs that enforce safety protocols. Time will tell if the cleanup ensures that the spill is contained. Hopefully, lessons learned here will be applied to future situations so that we avoid repeating the mistakes and make smarter decisions about safety.

It happens. Kids drop jelly jars, tankers rupture and cover beaches and birds with oil, beans get spilled. Teensy to gigantic, spills find a way to happen.





Labs are not immune to disaster. We see spills all the time. Most are small. Drops, splashing, smears, smudges, aerosols, and those tiny incidents of contamination that occur routinely are just part of our work environment. We are fastidious in our cleanliness and disinfection. We use our SOPs as fundamentals of our preventive maintenance strategy. But sometimes the feces collides with the air distribution mechanics (literally?? figuratively??) and all hell breaks loose.



(Not me!!)



The difference here is that we try really hard to keep lab spills from happening in the first place. Corner Canyon High School made some errors in practices and judgement that caused this spill to be dangerous. Let's see if they come up with a corrective action plan that mitigates the problem.

Dealing with spills is part of our responsibility to ourselves and our peers. Because, while we understand that some risk is inherent to our work, avoiding exposure in the first place is at the forefront of our safety plans. **Having a good spill kit is essential; having good practices and a mind toward safety keeps us from using it.**

We talk a good talk about spills, but when we face the challenge of containing a major spill (hmmmm, like a pandemic) we need to be sure we can walk the walk.

Have a great week and be safe,

Bryan

