Twitter Thread by Funranium Labs

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I thought I would make a new end of year CHOOSE YOUR OWN RADIATION ADVENTURE, except I realized I kept running face first into "All Of The Above".

So instead, I want to discuss archetypical accidents to try to encourage you to not be the cause/victim in one.

As we approach NYE 2020 with restrictions in place and limited staffing, on top of the usual ghost towns that institutions become during the holidays as the older staff members take use-it-or-lose-it vacations, we are particularly vulnerable to the first archetype: Work Alone

As a general rule, when you are doing particularly nasty things, high power laser alignment, critical lifts, easily dispersible radioactive materials, high voltage, etc. you don't do it by yourself.

The counterpoint is "I always do this by myself to minimize the number of people exposed to $HAZARD" is valid, but more you're the hands up close and personal. But you aren't alone. Someone's in shouting distance.

This time of year, you may be the only person in the building.

For better or worse, the holidays are when people try to do some of the most hazardous work or long delayed maintenance that makes everything else more dangerous, like repairing fume hood motors, because the number of other people whose work they could impact is reduced.

So, those sign in logs you walk past in the lobby? Sign them and sign out when you leave. If you have a status board, update it. Tell the facilities people, WHO YOU REALLY SHOULD BE ON A FIRST NAME BASIS WITH, that you are there. Tell family & friends when you expect to be home.

Because you are there, deciding to do something dangerous without much back up, because of the second archetype: Time Pressure.

If things we're going well, this work would be done already and you'd be one of the people on vacation, right?

More likely someone more senior assigned you this work and then *they* went on vacation.

Maybe the most recent results weren't great and you've gotta redo it all again because, fuck, that submission deadline for paper/conference/whatever is coming up. It's crunch time.

It's perfectly normal to look at the calendar, feel panic at an impending deadline, and decide "Yes, going into the lab at 10pm on Christmas Day is perfectly reasonable. Gotta get that started so I can come back to check on it at 8am."

I am having minor twinges even typing this.

You can feel the clock ticking, the weight of days falling away as the hours pile up.

You need to finish this. Looks like it's gonna be another 12-18 hour work day. You are a caffeine based lifeform who might have eaten yesterday.

YOU MUST BE FASTER & DO MORE!!!

This is when you start cutting corners, stop writing things down. When you miss steps because you're going too fast. Measurements get a little sloppy. Grab the wrong chemical or gear.

...and likely skip PPE entirely.

Because this is the infuriating part about the third archetype: Correct PPE Readily Available But Unused

Because you're alone with no one to yell at you. Because you're speeding and can't spare the precious seconds to put on those gogs or gloves.

Or, in the case of more than few laser injuries, were wearing laser safety eyewear but, buddy c'mon, you stopped working with that wavelength hours ago. DID YOU FORGET WHAT COLORS ARE??!!?

If this all sounds like Hell Work this is, perhaps, because you are a bit older and can't physically or mentally pull this shit anymore and you know it. Because the fourth archetype no longer applies to you: Early Career, Age 18-25.

The people we tend to kill and maim with hazardous work alone are our youth. Part of this is the general sense of immortality but also that they have the resilience to even begin to think this is a good idea.

Their elders take advantage of that to work those apprentices HARD.

If you asked me to do this at my advanced age of 45, you're likely to get a response of "Fuck you." Maybe "Fuck you, pay me" if I remotely entertained your request.

But 25 years ago good chance I would, with some blame going to archetype five: Male

Stupid, suicidal machismo.

The arrogance of machismo that says you are *so good* that you don't need that PPE. That you have all the hazards handled because you are IN CONTROL. You aren't gonna get hurt because and if you did, pfft, whatever, you can take it. Scars = cool stories, right?

And part of that arrogance comes from archetype six: Approximately One Year of Experience with the Process That Caused the Accident.

So, just long enough to start achieving competence so that you think you know what corners you can cut. But a long way from mastery.

There you go. Those are the Six General Accident Archetypes which makes it seem like I'm psychic when I pick up the phone and people start to worry I have spy cameras watching them.

For specific kinds of hazards, like lasers, I can add even more archetypes.

But let's review:

1) Working alone
2) After hours/long hours/around a holiday, with a looming dead line
3) PPE available but unused
4) Age 18-25
5) Male
6) With ~1yr familiarity with the process that caused of the injury

If this sounds like you, please make it to 2021.

~fin~