

THE TOX LAB

Podcast Transcript

Episode 15: Toxic TikTok Challenges

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TRANSCRIPT

Hi everyone. Welcome back to The Tox Lab. I'm Rebecca.

I'm Rob.

So Rob, what do Tide Pods, chroming, and nutmeg all have in common?

I can't think of a word that links them.

That's fair. They are all titles of really, really strange TikTok challenges.

Interesting.

And that's what we're going to be talking about today. Before we get into the episode, a big shout-out to one of our listeners who suggested that we cover some of the bizarre and toxic social media challenges that are out there.

And before we get too far into this, talking about these is absolutely not an endorsement.

Definitely not. Do not do any of the things we talk about in this episode today.

Or on this podcast in general, which is probably good advice.

So Rebecca, take us through some of these challenges.

The first one we're going to talk about is the Dragon's Breath challenge.

Dragon's Breath? I haven't heard of that one.

This challenge has been linked to snacks sold in some places that are infused or chilled with liquid nitrogen. They produce that dramatic smoky vapour effect, so they look like you are breathing smoke, hence the name Dragon's Breath.

I was going to ask how you infuse a snack with liquid nitrogen, but I suppose it is really about chilling it very rapidly right before serving it.

Exactly. But these are not harmless. There were reports in early 2023 of multiple children being hospitalised after consuming these sorts of products.

So are we talking about cold burns, inhalation risks, and that sort of thing?

Yes, a mixture of different hazards, including cold injury and potential inhalation-related issues.

Another couple of challenges that have gained popularity in recent years are the chroming challenge and the Galaxy Gas challenge.

I haven't heard of either of those, to be honest. I'm not especially up to date on TikTok challenges.

That is fair. The chroming challenge gets its name from the fact that people inhale volatile substances, often metallic paints or solvents, sometimes ending up with metallic residue around the face. The aim is essentially to inhale chemicals to get high.

This can involve substances like paint, hairspray, nail polish products, and similar volatile chemicals.

That sounds a lot like old-fashioned volatile substance abuse, which has been around for a very long time, except now with much more internet-friendly branding.

Exactly. And while the intended effect may be a brief euphoric or dissociative high, the harms can be severe: dizziness, vomiting, cardiac problems, brain injury, and of course death.

Sudden death with solvent abuse has been recognised for a very long time.

Yes, and there can also be longer-term consequences like memory problems and cognitive impairment.

The National Survey on Drug Use and Health in the US estimated back in 2015 that around 1.8 million adults had inhaled solvents in that year, and roughly 684,000 of those were aged 12 to 17, so right in that age group that is very vulnerable to this sort of social media influence.

It's terrifying, really.

It is. Galaxy Gas is a brand associated with nitrous oxide, and that has also become tied up with social media trends and challenge-style content.

So I know what nitrous oxide is. I wasn't aware of the branding angle, but nitrous oxide is well known. It's a dissociative anaesthetic with NMDA antagonist effects, can cause light-headedness and euphoria, and can absolutely be harmful.

Yes. Chronic use can lead to vitamin B12 deficiency and neurological problems, which is probably something we could do a separate deep dive on.

Another challenge that has reportedly gained popularity in some places is the so-called tranq challenge or tranquiliser challenge, where people take sedative medication and then compete to see who can stay awake the longest.

All of these sound like unbelievably bad ideas.

They really do.

The Tide Pod challenge is one that you must have heard of.

That one definitely made the news. The main thing I remember is detergent pod packaging suddenly becoming much more explicit about keeping them away from children.

Yes, and that is partly because of the wider conversation around these exposures. Back in 2012 to 2013, the American Association of Poison Control Centers recorded 17,230 exposures to detergent pods in children younger than six years old. That rose to around 22,000 exposures in the same age group the following year.

Exposure among teenagers also increased. In 2017 there were 53 reported teenage exposures in total, but in January 2018 alone there were 143 teenagers reported to have been exposed.

So that is a massive increase in a group where those exposures are much less likely to be accidental.

Exactly. A lot of the exposures in children under six are probably accidental, because the pods are brightly coloured and can look appealing. But in teenagers there is much more concern that these are deliberate.

The effects reported include the obvious gastrointestinal symptoms like nausea, vomiting, and diarrhoea. There were also reports of dysphagia related to mucosal burns and ulceration.

More dramatically, some patients developed altered mental status requiring airway protection and intubation. There were also seizures, respiratory effects, acute kidney injury, metabolic acidosis, raised lactate, and even hypoglycaemia.

That is more severe than I think a lot of people would guess. I would have expected caustic injury, but not necessarily that broader toxic picture.

Yes. The exact mechanisms behind some of the metabolic abnormalities are not completely straightforward. One theory involves propylene glycol, which can be metabolised to lactate, acetate, and pyruvate, and may contribute to metabolic acidosis, raised lactate, and altered mental status. Other alcohols or solvent-type ingredients in the products may also contribute to the neurological effects, including seizures.

And of course the alkaline nature of the detergent contents is a major part of what causes the burns.

So, in summary: don't eat laundry pods.

Definitely don't eat laundry pods.

The nutmeg challenge follows a similar line to older internet challenges like the cinnamon challenge. In this version, people consume large amounts of nutmeg, sometimes a couple of tablespoons, because they have heard it can make you high.

We actually covered nutmeg in our festive poisons episode, so if you want more on that, go and listen to that one. But the important point here is that large amounts of nutmeg can absolutely cause toxicity.

Unlike cinnamon, which is still a terrible idea to inhale or choke on, nutmeg also brings genuine pharmacological toxicity when taken in high doses.

Another challenge is the Borg challenge, which stands for Blackout Rage Gallon.

That is certainly imaginative naming.

It involves taking a large container, adding alcohol, usually vodka, then water and electrolyte powder, and drinking it over a session.

Bear with me while I convert the volume mentally, because a gallon is a lot.

It really is. And the point is that it still represents an enormous amount of alcohol.

And I assume the electrolyte powder is meant to make people feel as though this is somehow safer?

I think that's the logic, if you can even call it logic. The idea seems to be that the electrolytes and dilution will keep you hydrated or reduce the harm. But they are not going to save you from consuming huge quantities of alcohol.

Back in March 2023, dozens of students were reportedly hospitalised for alcohol poisoning after events linked to this challenge near the University of Massachusetts.

I'm not remotely surprised. There is enough alcohol in that kind of setup to kill somebody.

Exactly. Alcohol poisoning can cause confusion, slurred speech, inability to coordinate movement, vomiting, irregular breathing, seizures, loss of consciousness, and death.

The next challenge is the Benadryl challenge, which gained a lot of attention in 2020. This involves deliberately taking large amounts of diphenhydramine and filming the resulting effects.

I actually have heard of that one.

There we go, one you know.

Benadryl is sold as an antihistamine and contains diphenhydramine. It is also used as an over-the-counter sleep aid, so it is fairly easy to access in some places.

At high doses it can cause sedation, but also delirium and hallucinations. A lot of that is due to its anticholinergic effects, in addition to its antihistamine action.

So the anticholinergic symptoms you might expect would include blurred vision, dry mouth, urinary retention, tachycardia, and gastrointestinal effects such as nausea and vomiting.

And diphenhydramine can be fatal at high doses as well.

Yes. There have been reports of teenagers being hospitalised after taking large numbers of tablets, and at least one highly publicised case involved a 13-year-old who developed seizures and died after participating in the trend. That really shows how serious these challenges can be.

The final challenge we're going to talk about today is the One Chip Challenge.

I haven't heard of that one.

This involves eating a single extremely spicy chip containing very high levels of capsaicin from peppers such as the Carolina Reaper, and then trying not to eat or drink anything afterwards.

So basically an old-fashioned chilli-eating contest, but repackaged for the internet?

Essentially, yes. In some versions, the chip was dyed blue so that participants could prove they had done it.

It sounds ridiculous, but there were very serious outcomes linked to it. In September 2023, a 14-year-old died after taking part in the challenge. He also had an underlying medical condition, and that was considered a contributing factor.

This brings us to an interesting point, because unlike some of the other things we've talked about, chilli and capsaicin are food-related substances. Capsaicin is the active component in chilli peppers. It's also used in medicine and, of course, in pepper spray. So it sits across a whole spectrum of uses.

In normal dietary amounts, it is generally safe.

Yes, but that doesn't mean extreme doses are safe. Very high doses can still cause serious harm, especially in people with underlying vulnerabilities. Capsaicin works by activating pain pathways, which is why it causes that burning sensation. Extremely intense exposure can be much more than just unpleasant.

This case was particularly tragic because there was an underlying cardiac issue, and in that context a very high capsaicin exposure may have been a major physiological stressor.

So what was the outcome? Is that challenge still around?

The original manufacturer discontinued that product after the fatality. Other companies have since produced similar items, but the original product associated with the challenge was withdrawn.

We've talked about quite a few different challenges there. I'm not a psychologist, but why do you think people do this?

I think some of it is probably the appeal of attention, novelty, and a kind of brief internet fame. And maybe also the sense of belonging to an online trend or community.

They still seem incredibly extreme, though. I'm old enough to remember pre-TikTok social media challenges like the ice bucket challenge, which was really just light-hearted and mostly harmless while raising money and awareness. Some of what we've talked about today carries serious and obvious risk.

Definitely. There are real long-term complications and real fatalities associated with some of these challenges, and I don't think people always appreciate that when they are scrolling through social media and seeing them presented as funny or entertaining.

So what's the advice for listeners?

The big message is that just because something is trending on social media does not mean it is safe, sensible, or worth trying.

And also be aware of what younger people have access to, because so many of the people affected in these reports were children or teenagers.

Exactly.

I think we're going to wrap it up there. I hope you've enjoyed listening.

Do give us a like and a follow on social media. You can find us on Instagram at @the_tox_lab.

Feel free to comment on any of our posts or send us a message if you have ideas for topics you'd like us to cover in a future episode.

Hope you all have an amazing week, and we'll see you next time. Bye.