

A background image of a police car at night with its lights on, partially obscured by the title text.

# HOW OFFICERS CAN TACKLE THE CHALLENGES OF DRUG FIELD TESTS HEAD ON

## Today's challenges with field drug tests

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Since the early 1970s, presumptive field tests have been used to move suspects from suspicion to conviction. Among these drug field tests, color-change tests (also known as color tests) are the most commonly used, but they come with unique challenges that have made some officers wary of using them.

PoliceOne asked officers in March 2019 to weigh in on the biggest challenges they face with field drug tests. Among the 301 officers polled, 99% said they used colorimetric tests, and around 89% said they use them anywhere from once a day to at least once a month.

The biggest challenges associated with these tests, according to the survey respondents, are the following:

- **Risk of exposure (63%).**
- **Confusing degree of color change (56%).**
- **Substance deterioration risk (20%).**
- **Interpretation subjectivity due to lighting conditions (16%).**

# How the opioid crisis created misconceptions about fentanyl exposure

You don't have to look far to find stories in the news about an officer's accidental exposure to fentanyl. Of course there have been several cases of fentanyl exposure that highlight the graveness of the opioid crisis and how it puts first responders at potentially fatal risk, but there have also been claims that have not been verified and have drawn increased scrutiny from toxicologists.

In a [position paper](#), scientists from both the American College of Medical Toxicology and the American Academy of Clinical Toxicology argued that it's nearly impossible to overdose on illegally manufactured fentanyl through transdermal (skin) exposure.

"The reality is that it takes hours of direct contact for officers to get fentanyl through their skin, so even if you had carfentanil in your bare hands for 15 minutes, you still wouldn't have a measurable amount in your body," said Dr. Christina Baxter, owner of Emergency Response Tips, an organization that advises agencies on policies for emergency response and defense. "And you would not be

exhibiting symptoms about two hours after having it in your hand."

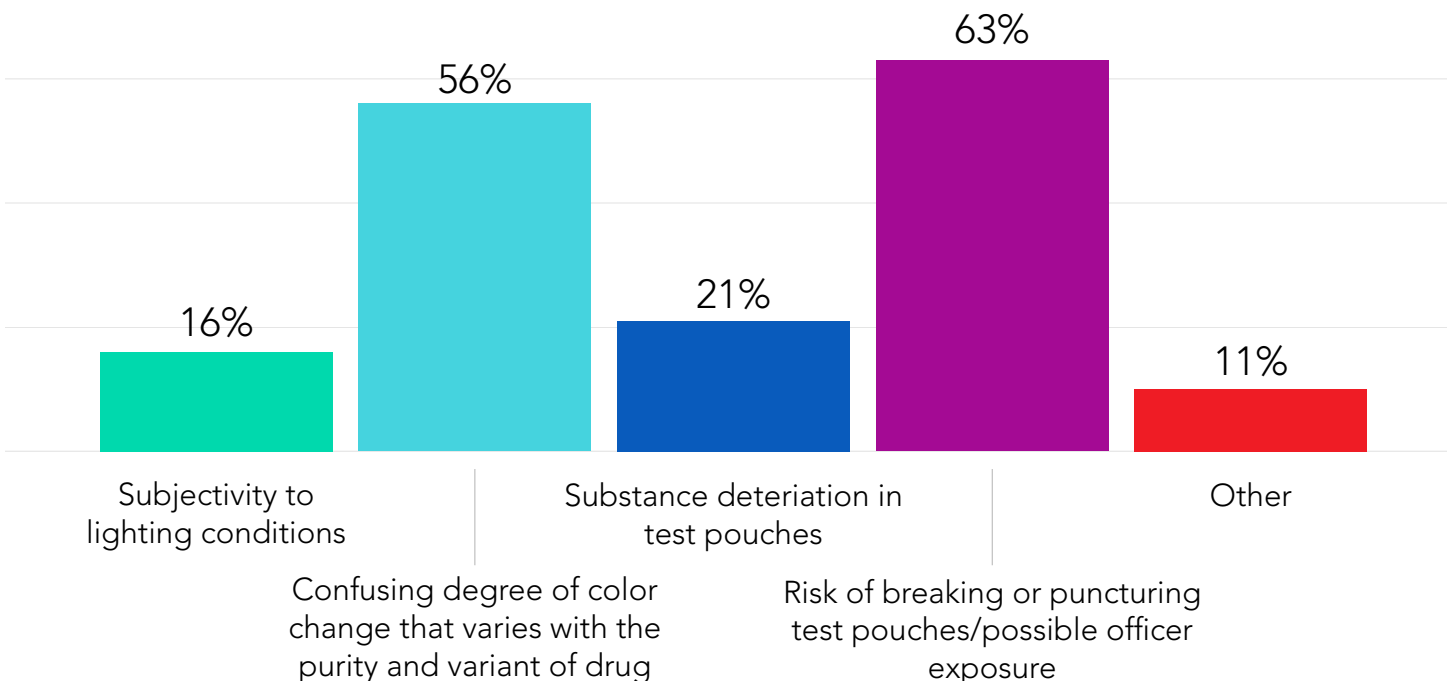
So how did misinformation on the dangers of fentanyl exposure spread?

A rash of media reports that incorrectly claimed first responders were overdosing on fentanyl weren't the only culprits behind the panic. Even the [CDC released a video](#) that contradicts information previously released, which stated that "Brief skin contact with illicit fentanyl is not expected to lead to toxic effects if any visible contamination is promptly removed."

Matt Gutwill, president of the [New England Narcotic Enforcement Officers Association](#), said fentanyl myths have hindered law enforcement officials from doing their jobs.

"If you use the proper testing equipment and PPE, fentanyl testing can be done easily," said Gutwill, who has worked in law enforcement for over 30 years. "I've had fentanyl on my hands before, and I'm talking to you right now."

## What do you think is the biggest challenge of using color-change tests?



# Subjective interpretations could lead to erroneous test results

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Experts like Baxter agree that tests that require subjective interpretations (such as traditional colorimetric tests) can easily lead to misinterpretation.

Often officers in the field have to decide whether the color of the test solution matches the one the substance is being tested for, and it's every agency's

fear that the limitations of such drug screening tests could lead to lawsuits, or even worse, a wrongful conviction.

The good news is that the problems of these presumptive tests can be overcome with the latest technological advancements in colorimetric tests.

## How an app can help officers avoid subjective interpretation and lab lag time

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For decades, traditional field testing kits have remained constant in their capabilities despite recent advancements in technology that could help address some of the biggest challenges that remain with colorimetric tests.

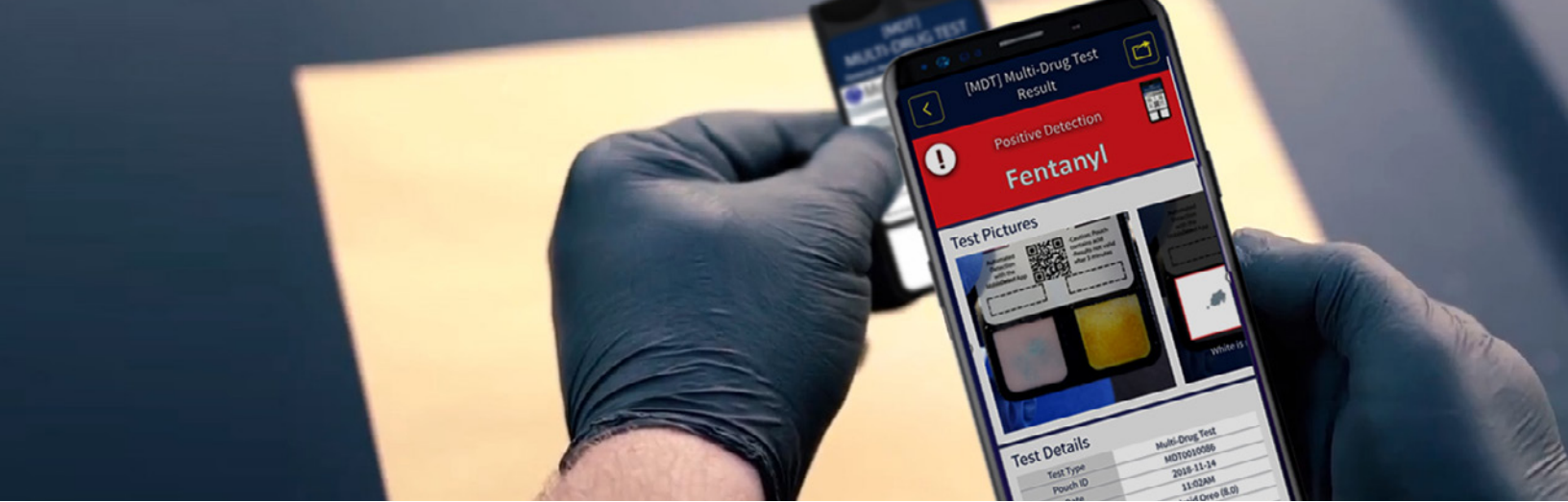
Working closely with law enforcement officers to improve drug field test capabilities, [DetectaChem](#) has introduced an app that evaluates the results of a color change. The app automates the color assessment process and removes the need for an officer to reference color charts and use their own subjective interpretation. Among their various drug testing pouches, their Multi-Drug Test (MDT) is the most popular. The MDT test can check for fentanyl analogues, heroin, cocaine, methamphetamine, MDMA and other opiates, including oxycodone and buprenorphine, in a single test. Others are available for detecting bath salts, K2/Spice, gunshot residue, THC/CBD, LSD, PCP, GHB, mushrooms and more.

The [MobileDetect](#) application—which can be downloaded with unlimited use free of charge—is used in tandem with the company's custom pouches, which contain a test swab and chemical reagents that meet NIJ standards for probable cause.

Unlike traditional test kits that rely on plastic or glass vials that could break or puncture the test sample or officer, the MobileDetect pouches allow officers to detect trace and bulk levels of drugs with minimal to no exposure to the sample. With a low detection threshold of about 500 nanograms (depending on the substance that's being tested), it also allows users to detect trace residue from bags even if the sample is missing or has been fully used. This is especially useful for trash pull probable cause applications.

An officer can start by using pouch's removable swab and testing the sample, then squeezing the pouch to break the internal seals of the test reagent to wait for a reaction to occur. Once the color change occurs, then the QR code on the pouch can be scanned with the smartphone camera that runs in the MobileDetect app. Almost instantly, the app will bring up an automated result that matches the colorimetric reaction to the substance being tested.

Each scan is automatically stored in an instant report with images, time and date stamps, GPS mapping and more. The DetectaChem app also offers GPS coordinates of the test location (this feature can be turned off), records of the date and time of the test and note-taking capabilities that could help with



probable cause or court documentation purposes. The MobileDetect app was designed to preemptively address questions and concerns that are typically asked of officers in court situations.

“One thing they [DetectaChem] did really well with the app is to take the cross-sensitivities of all of the tests into account and said ‘You know what? With colorimetric tests there’s often false positives, so we’re going to include multiple tests in one ticket,’” Baxter said. “So it allows the user to take one sample and do all of your testing at one time.”

In the past, misinformation on fentanyl exposure has led several agencies to choose to send any powdered samples directly to laboratories without first conducting field tests, but these well-intentioned decisions have unfortunately created a large backlog in many lab and court systems.

“You’re looking at three to five months of a waiting period when you could have immediately investigated further and made a decision under your discretion based on the facts,” said Gutwill.

Using the app eliminates this delay. Officers can not only test the suspected drug sample immediately on the scene, they can also create a report directly on the app that can be used as evidence for probable cause and prosecution. The last thing you want is to miss an opportunity to capture probable cause documentation, so having the ability to capture the GPS coordinates of the test, date and time, evidence photos, custom notes and more is invaluable.

Gutwill said the app also helps with productivity since it allows an officer to generate a PDF report with photo documentation, all within a couple of taps. This PDF report can be easily sent via email or text message directly from the phone.

In a recent Department of Defense testing evaluation, the MobileDetect MDT pouch was ranked as the No. 1 colorimetric solution for fentanyl detection. MobileDetect pouches have also been evaluated, tested and adopted by several Department of Homeland Security and Department of Justice agencies with positive results.

#### About the sponsor



# DETECTACHEM

DetectaChem is a Texas-based privately held company and manufacturer of rapidly deployable, handheld, intelligent, and easy-to-operate drug and explosive detection systems deployed globally. DetectaChem is proud to be a strong supporter of the U.S. military, law enforcement and all first responders that protect our country. More information at [www.DetectaChem.com](http://www.DetectaChem.com).