



Battling the evolving **drug misuse epidemic**

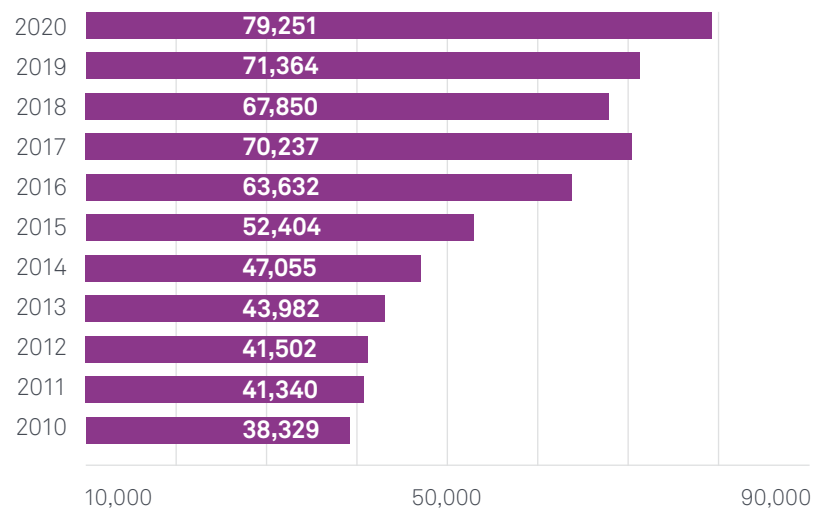
More than 16 million people use prescription drugs for non-medical reasons¹

Drug overdose deaths in US: a decade in review

2018 marked the first time in more than a decade that the Centers for Disease Control and Prevention (CDC) reported a decline in the number of drug overdoses¹—a welcomed development in an epidemic that has long ravaged communities across the country.

However, the decline was sharply reversed just a year later. Overdose deaths have increased dramatically in 2019 and 2020.² From May 2019 to May 2020, over 81,000 drug overdoses occurred in the United States—the largest number of overdose deaths ever recorded in a 12-month period.²

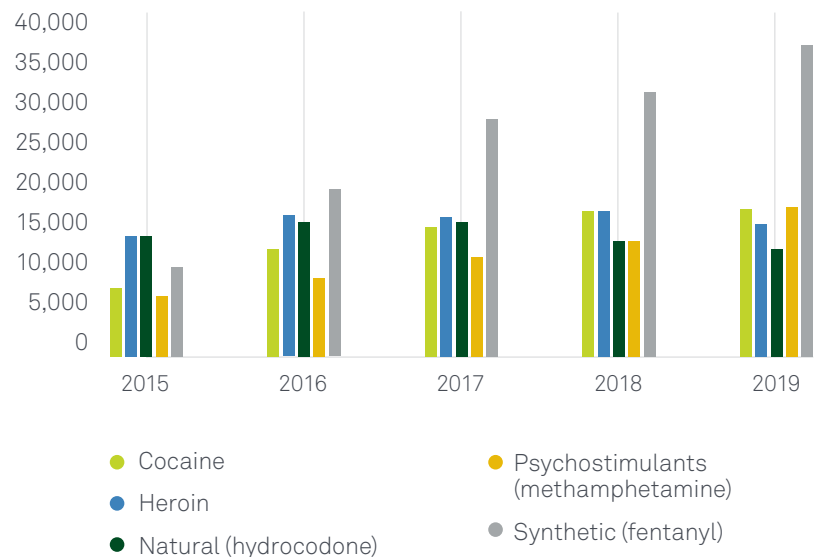
Overdose deaths in the United States, 2010-2020³



Opioids continue to be a driving force in the drug epidemic

In 2019, 70% of overdose deaths involved an opioid.³ The majority of opioid-related deaths involved synthetic opioids, such as fentanyl. One positive trend is the continued decline in overdose deaths involving natural and semi-synthetic opioids, such as hydrocodone, which could be tied to the CDC guidelines for prescribing opioids for chronic pain published that year.⁴

Opioid-related overdose deaths³



Protect your patients from medication misuse

It's a startling statistic. An estimated 1 person in 20 uses prescription drugs for "non-medical reasons."⁵ Not only do these patients put themselves at grave risk, they also jeopardize any healthcare professional or practice that happens to prescribe them medication.

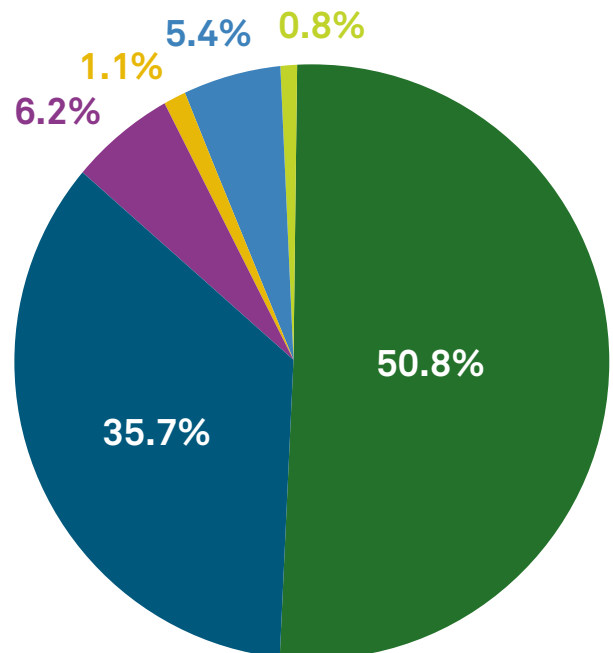
It's important to understand the root causes of prescription medication misuse and the implications for your patients and practice. Only then can you take steps to ensure a safer environment for all.

Prescribed legally, then passed along

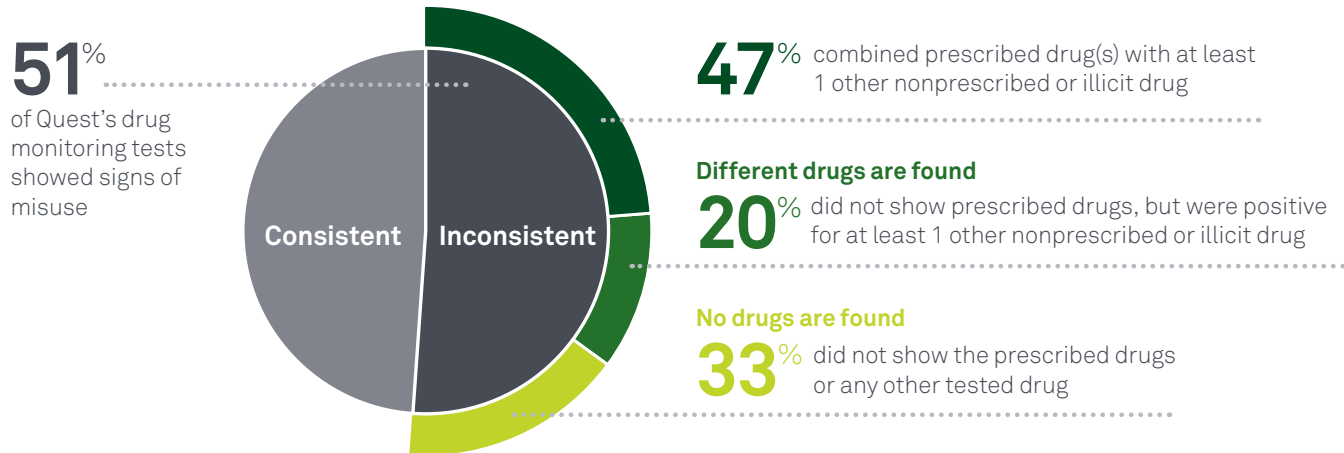
Among people who misuse medication, more than half take drugs prescribed for someone else.

- Friend/relative
- One doctor
- Drug dealer
- Multiple doctors
- Other
- Stole from doctor

Source of pain relievers for misuse (2019)⁵



Quest drug testing data shows that more than **half of patients misuse their medications**⁶



Prescription drug misuse continues to be a prevalent problem. Possible inconsistencies may be attributed to a number of factors, including patients who:

- Don't follow prescription instructions
- Underestimate the addictiveness of pain medication and other controlled substances
- Assume prescriptions are safe under all circumstances
- Share prescription drugs with friends or family
- Allow other people access to medications by failing to secure them
- Forget to notify their doctor of prescriptions from other healthcare providers
- Increase dosage without a physician's approval

Drug monitoring can help provide clinicians with insights into multiple forms of misuse, including substance use, drug combinations, and medication noncompliance. All of these inconsistencies are important insights for the clinician, and can help direct patient conversations and guide treatment decisions.



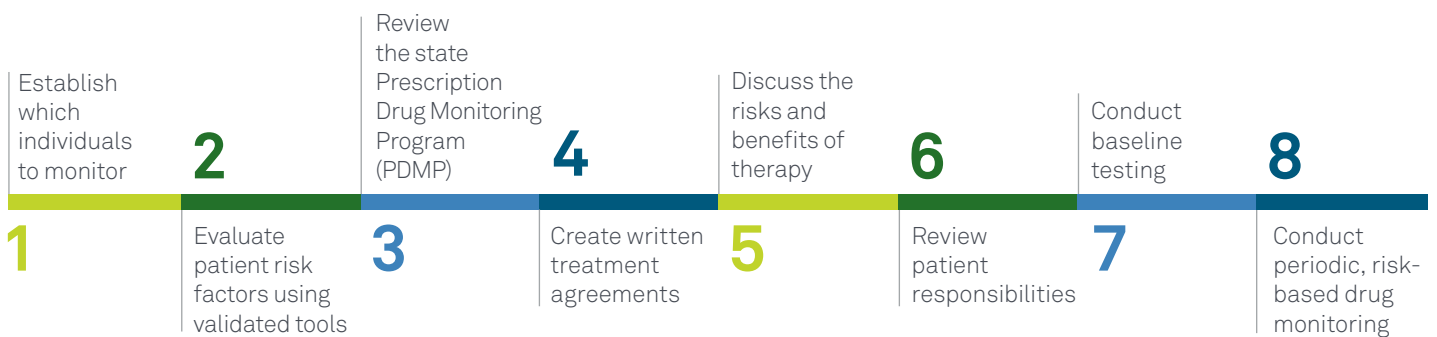
Every practice needs a process to monitor controlled medication use

For patients with chronic pain or mental health conditions, access to controlled medications may be an important treatment option. Several leading associations—including the CDC,⁴ the American Association for Clinical Chemistry (AACC),⁷ and the American Society of Addiction Medicine (ASAM)⁸—support the use of drug testing. An appropriate drug monitoring protocol can help provide these patients access to the medications they need, while helping to keep you, your patients, and your community safe.

Drug monitoring can help to:

- Identify prescription drug use or non-use
- Detect use of illicit substances
- Identify potential drug-drug interactions
- Complement state Prescription Drug Monitoring Programs to provide a fuller picture of patient status
- Maintain patient access to prescription therapies
- Aid risk mitigation: help keep patients safe, help protect clinician practices

Key elements of a drug monitoring protocol when prescribing controlled medications⁹:



How to determine frequency of testing

- Identify patients at high risk for opioid abuse, misuse, or diversion for whom more intensive monitoring may be appropriate⁹
- Validated risk assessment and stratification
- Clinician's documented medical necessity
- Patient history, clinical presentation, and/or community usage



Take advantage of our medMATCH® reports

Our medMATCH® reports are designed to provide actionable insights with the goal of “at-a-glance” interpretation. The reports provide a summary of your patient’s consistent and inconsistent results for prescribed drugs, and also includes reporting on nonprescribed, inconsistent drugs. This allows you to have a complete view of drugs that your patient is taking, address any non-compliance issues, and alerts you of any potential drug misuse or dangerous drug combinations.

medMATCH reports offer providers an intuitive, streamlined process from ordering to the delivery of the final report.

medMATCH® Drug Monitoring Report			
medMATCH Summary medMATCH indicates presence or absence of prescribed and non prescribed drugs. Prescribed drugs are provided by the ordering clinician.			
Legend	Prescribed Consistent Drugs prescribed and detected	Prescribed Inconsistent Drugs prescribed but not detected	Not Prescribed Inconsistent Drugs detected but not prescribed
✓ = Consistent	✓ = Buprenorphine Nalox	x = Gabapentin	x = Ethyl Sulfate (ETS)
x = Inconsistent			
◆ = Prescribed			
Prescriptions reported by client with no testing ordered:		Zolpidem	
DRUG MONITORING, PANEL 8 WITH CONFIRMATION, URINE			
Alcohol Metabolites	POSITIVE	500 ng/mL	
Ethyl Glucuronide (ETG)	NEGATIVE	500 ng/mL	
Ethyl Sulfate (ETS)	100	100 ng/mL	x INCONSISTENT
Alcohol Metab Comments: See Alcohol Metab Notes, LDT Notes			
Amphetamines	NEGATIVE	500 ng/mL	
Benzodiazepines	NEGATIVE	100 ng/mL	
Buprenorphine	POSITIVE	5 ng/mL	
◆ Buprenorphine	101	2 ng/mL	✓ CONSISTENT
◆ Norbuprenorphine	105	2 ng/mL	✓ CONSISTENT
◆ Naloxone	110	2 ng/mL	✓ CONSISTENT
Buprenorphine Comments: See Buprenorphine Notes, LDT Notes			

medMATCH Summary expanded to 3 categories

Alerts clinician to non-tested prescription drugs

Inconsistent results are flagged

Drug Class Specific Notes and Lab-Developed Test (LDT) notes are consolidated and listed at the end of report

Consistent results for prescribed drugs are flagged



Put our reputation for **reliability, commitment, and excellence** to work for you

Drug monitoring is just one way we can help your patients, your practice, and your community. Quest Diagnostics is far more than a lab. We're an industry leader in laboratory diagnostics and information services with clinical experts, resources, and services to help you meet your patients' needs. With Quest at your side, you can be confident you'll have the insights you need to better the health of your patients, and your practice.



Health plan access. Broad health plan coverage with most major insurers makes testing more accessible and can encourage adherence.



Convenient testing locations. Our expansive network of more than 2,250 nationwide Patient Service Centers makes it easier for patients to follow through with testing.



Complete diagnostic menu. Our comprehensive menu of tests—from routine to specialized—was built with the varied needs of you and your patients in mind.



Options for underserved patients. We offer a patient assistance program to help ensure that uninsured patients receive care, with each case handled personally.



Seamless EHR integration. Manage all your lab testing needs with the comprehensive Quanam® Lab Services Manager platform; exceptional service and connectivity with over 650 EMR systems.

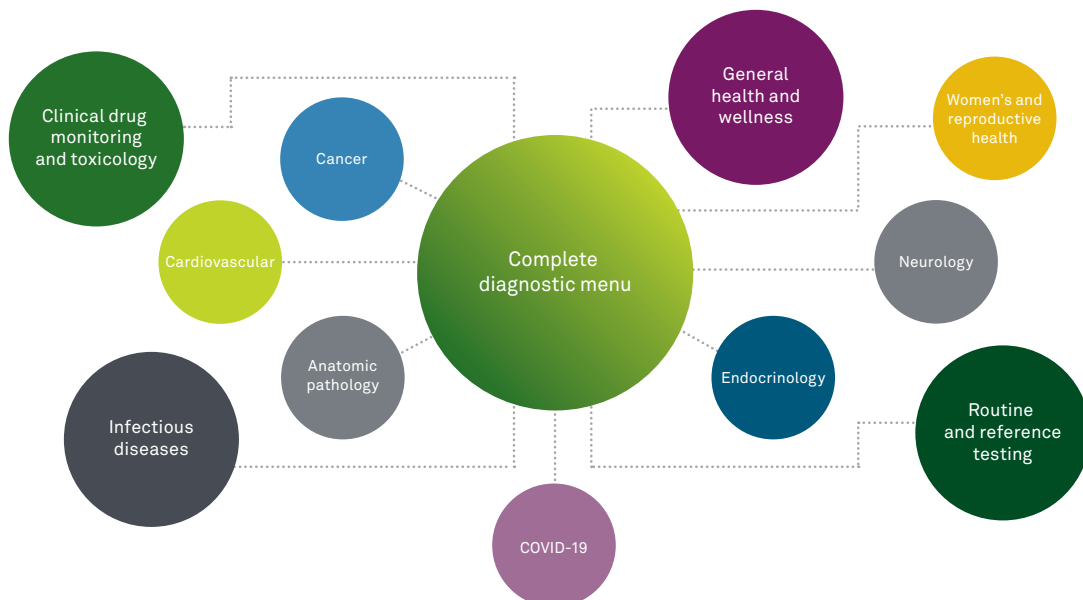


Access to expertise. With more than 600 MDs, PhDs, and genetic counselors, our team is available for consultation on test selection and results interpretation.

Complete **diagnostic menu**

Lab testing for the primary care practice—from routine to specialty

Whether you need basic CBCs and thyroid testing as part of an annual wellness visit, infectious disease testing, or specialty cardiac or neurological testing, you can get it all with Quest Diagnostics. Our comprehensive menu helps you order the right test for the right patient at the right time, to help you make the right decisions for your patients' care.



Quest Diagnostics Clinical Drug Monitoring

Rely on a trusted and reliable drug testing laboratory

Quest Diagnostics helps you protect your practice and patients with state-of-the-art testing, including an extensive menu for prescription pain medications, other controlled substances, and illicit drugs. With fast turnaround, accurate results, an industry-leading testing portfolio, and an array of on-staff toxicologists and medical experts, Quest is committed to working with you to provide the services, results, and insights you need at each stage of your patient's care.

Our state-of-the-art drug testing offering



Comprehensive menu—Prescription drugs used in treatment of chronic pain, ADHD, anxiety, depression, substance use disorder, other controlled medications, and substances of abuse.



Performance—High-sensitivity, low cut-off levels designed to detect drugs at typical dosage levels. Fast turnaround time and results confirmation.



Reporting—Optional medMATCH results interpretation: “Inconsistent” when results do not match prescriptions provided by clinician. Quarterly practice level data and analytics.



Connectivity and service—Exceptional service and efficiency that aligns with your workflow. Connectivity with over 650 EMR systems.



Expert support—Toxicology experts to answer questions on test selection and results interpretation at 1.877.40.RXTOX (1.877.407.9869).

Stay current in drug monitoring with new insights, blog posts, and updated resources available at QuestDrugMonitoring.com



Contact your Quest Diagnostics sales representative:
call 1.866.MYQUEST (1.866.697.8378) or visit QuestDiagnostics.com.

References:

1. CDC. Drug overdose deaths. Reviewed March 19, 2020. Accessed January 13, 2021. <https://www.cdc.gov/drugoverdose/data/statedeaths.html>
2. CDC. Overdose deaths accelerated during COVID-19: expanded prevention efforts needed. Reviewed December 18, 2020. Accessed January 13, 2021. <https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html>
3. CDC. Vital statistics rapid release: provisional drug overdose death counts. Reviewed January 13, 2021. Accessed January 13, 2021. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>
4. Dowell D, Haegerich TM, Chou R. CDC guideline for prescribing opioids for chronic pain – United States, 2016. *MMWR Recomm Rep*. 2016;65(1):1-49. doi:10.15585/mmwr.rr6501e1
5. SAMHSA. *Key substance use and mental health indicators in the United States: results from the 2019 National Survey on Drug Use and Health*. 2020. HHS publication PEP20-07-01-001. Accessed January 20, 2021. <https://store.samhsa.gov/product/key-substance-use-and-mental-health-indicators-in-the-united-states-results-from-the-2019-national-survey-on-drug-use-and-health/PEP20-07-01-001>
6. Drug Misuse in America 2019: physician perspectives and diagnostic insights on the evolving drug crisis. Quest Diagnostics Health Trends™. Published October 19, 2019. Accessed January 15, 2021. https://www.questdiagnostics.com/dms/Documents/drug-prescription-misuse/Health_Trends_Report_2019.pdf
7. American Association for Clinical Chemistry (AACC). Using clinical laboratory tests to monitor drug therapy in pain management patients. Published January 1, 2017. Accessed January 13, 2021. <https://www.aacc.org/science-and-practice/practice-guidelines/using-clinical-laboratory-tests-to-monitor-drug-therapy-in-pain-management-patients>
8. Jarvis M, Williams J, Hurford M, et al. Appropriate use of drug testing in clinical addiction medicine. *J Addic Med*. 2017;11(13):163-173. doi:10.1097/ADM.0000000000000323
9. Adler JA, Jackson WC. Implementing a prescription drug monitoring protocol to ensure responsible opioid prescribing. *Pain Med News*. Published September 2018. Accessed January 15, 2021. https://www.painmedicineweb.com/download/BB186_WM.pdf

Image content features models and is intended for illustrative purposes only.

QuestDiagnostics.com

Quest, Quest Diagnostics, any associated logos, and all associated Quest Diagnostics registered or unregistered trademarks are the property of Quest Diagnostics. All third-party marks—® and ™—are the property of their respective owners. © 2021 Quest Diagnostics Incorporated. All rights reserved. SB5718 03/2021

