

# TOXICOLOGY

## What is Toxicology?

Toxicology is the scientific study of adverse effects that occur in people due to chemicals. It includes environmental agents and chemical compounds found in nature, as well as pharmaceutical compounds that are synthesized for medical use by humans.

## Benefits

*Accuracy of results*

*Compliance Monitoring*

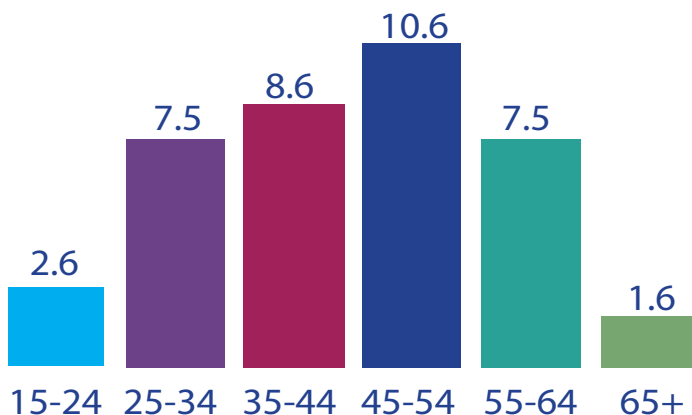
*Mixed drug toxicity*



Our **Tox Advantage**<sup>®</sup> test provides the most accurate information about medication and other substances in a patient's system from either urine or oral samples. This information helps guide a clinician's treatment plan and insures the safe use of prescriptions by analyzing the relationship between the dose and its effects. Aeon believes every patient deserves the highest level of care and that clinicians deserve the ability to **Prescribe with Confidence**<sup>®</sup>.

As an industry leader, Aeon delivers a customizable testing menu to a vast array of industries, including physicians offices, pain management practitioners, rehabilitation centers and hospitals. We give you access to a highly qualified scientific team of Ph.D.'s and chemists to incorporate the industry's best practices into your business.

**Rx Opioid Overdose Death Rates (per 100,000) by Age Group**



<https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6450a3.htm#fig1>

### Our quantitative drug testing for urine and oral fluid features:

- ▶ Proprietary methodologies performed on state-of-the-art LC/MS/MS instrumentation
- ▶ Expansive and customizable testing of over 85 analytes
- ▶ Clinical consultations available at all times
- ▶ Industry leading turnaround times
- ▶ Easy to read report formats delivered via EMR integration, web portal or fax
- ▶ Exemplary customer service - **Team Aeon is always here for you!**

**Up to 36 Million  
people abuse  
Opioids worldwide**

# TOx Advantage®

## ALCOHOL

Ethyl Glucuronide

Ethyl Sulfate

## ANTICONVULSANTS/

## OTHER MEDS

Gabapentin

Pregabalin

Levetiracetam

## BARBITURATES

Phenobarbital

Butalbital

Amo/Pentobarbital

Secobarbital

## BATH SALTS

MDVP

Methylone

Pentedrone

Mephedrone metabolite

Alpha-PVP

Alpha-PVP metabolite

## BENZODIAZEPINES

Alpha-Hydroxy Alprazolam

7-Amino Clonazepam

Lorazepam

Oxazepam

Temazepam

Nordiazepam

Diazepam

Desalkyl Flurazepam

Flunitrazepam

Alpha-Hydroxy Midazolam

Alprazolam\*

Clonazepam\*

## BUPRENORPHINE

Buprenorphine\*

Buprenorphine-glucuronide

Norbuprenorphine-glucuronide

## CANNABINOIDS

THC-COOH

THC\*

## KAVA

Dihydrokavain

## KRATOM

7-Hydroxymitragynine

## MUSCLE RELAXANTS

Carisoprodol

Meprobamate

Cyclobenzaprine

## NICOTINE

Cotinine

## OPIATES/OPIOIDS

Morphine

Oxymorphone

Hydromorphone

Codeine

Oxycodone

Noroxycodone

Hydrocodone

Norhydrocodone

Dihydrocodeine

Naloxone

6-MAM (Heroin Metabolite)

Tramadol

O-Desmethyltramadol

Methadone

EDDP (Methadone Metabolite)

Meperidine

Normeperidine

Tapentadol

Desmethyl Tapentadol

Fentanyl

Norfentanyl

Propoxyphene

Norpropoxyphene

Sufentanil

Naltrexone

## OTC PAIN MEDICATIONS

Ibuprofen

Acetaminophen

Pseudoephedrine

## OTHER ILLICITS

MDMA

MDA

Benzoylcegonine  
(Cocaine Metabolite)

Cocaine\*

PCP

## SLEEP AIDS

Zopiclone

Zaleplon

Zolpidem metabolite

Zolpidem\*

## STIMULANTS

Methamphetamine

Amphetamine

Methylphenidate

Ritalinic Acid

Phentermine

## SYNTHETIC CANNABINOIDS

JWH-250 metabolite

JWH-73 metabolite

JWH-18 metabolite

## TRICYCLICS/ ANTIDEPRESSANTS

Amitriptyline

Nortriptyline

Imipramine

Nortrimipramine

Desipramine

Fluoxetine

Doxepin

Desmethyl Citalopram

Desmethyl Venlafaxine

Carbamazepine-10, 11-Epoxyde

Carbamazepine

Hydroxy Bupropion

Sertraline

## OTHER

Desomorphine

Duloxetine

Lamotrigine

Oxcarbazepine

10,11-Dihydro-10-  
hydroxy Carbamazepine

## \*ORAL SWAB ONLY

## IMMUNOASSAY DRUG SCREEN

Oxycodone

Amphetamines

Opiates

Cocaine

Metabolite

Benzodiazepines

THC

PCP

6-MAM (Heroin)

MDMA (Ecstasy)

Methadone

Buprenorphine

Barbiturates

## SPECIMEN VALIDITY

pH

Creatinine

Specific Gravity

Oxidants