

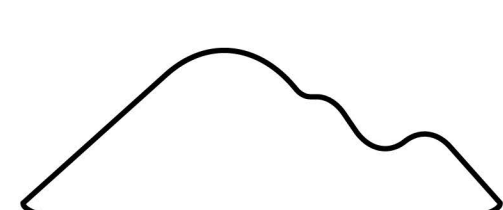
# CONFIRMATORY ID USING GC/MS

Gas Chromatography/Mass Spectrometry (GC/MS) is considered the 'gold standard' when it comes to confirmatory chemical identification of trace and bulk samples.

Here's how on-site GC/MS can help provide critical information within minutes when a scenario suggests a need for confirmatory identification.

## 1. SAMPLING

GC/MS can sample all phases of matter



SOLID

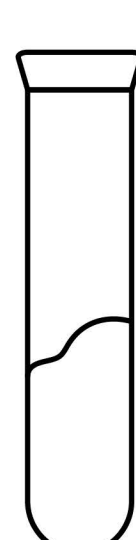


LIQUID

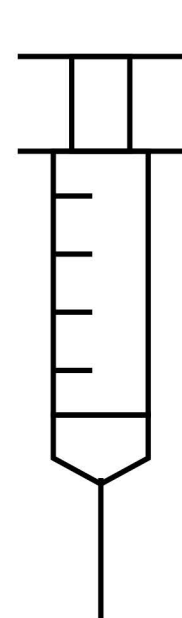


GAS

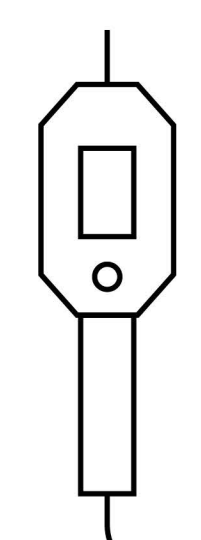
Each type of matter calls for a different sampling technique



SOLVENT EXTRACTION



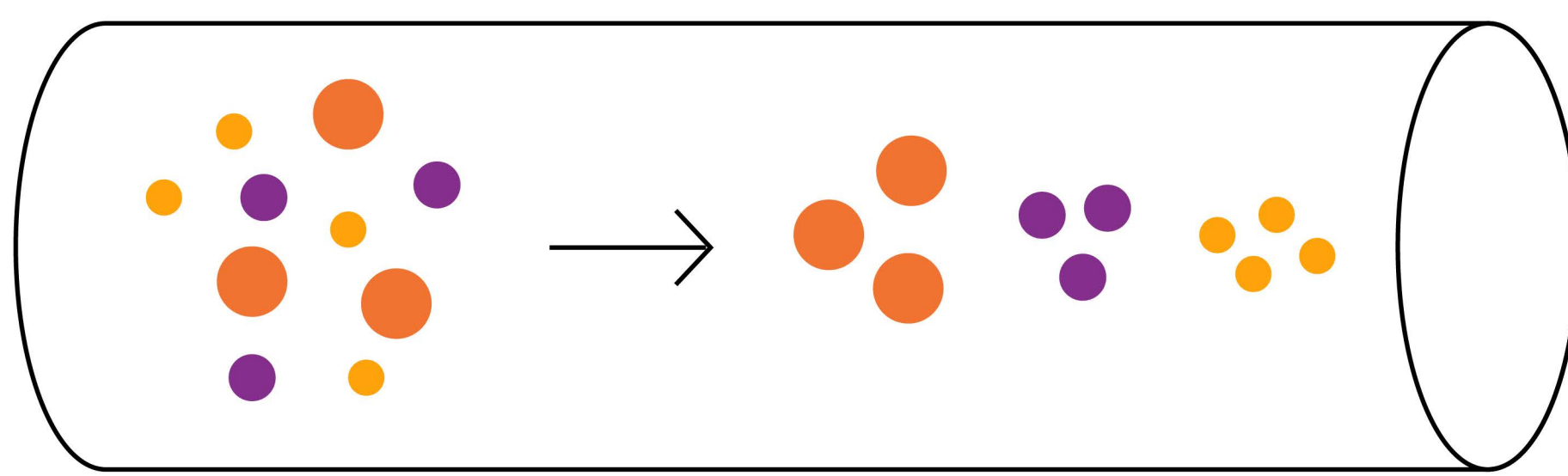
DIRECT INJECTION



SAMPLE PROBE

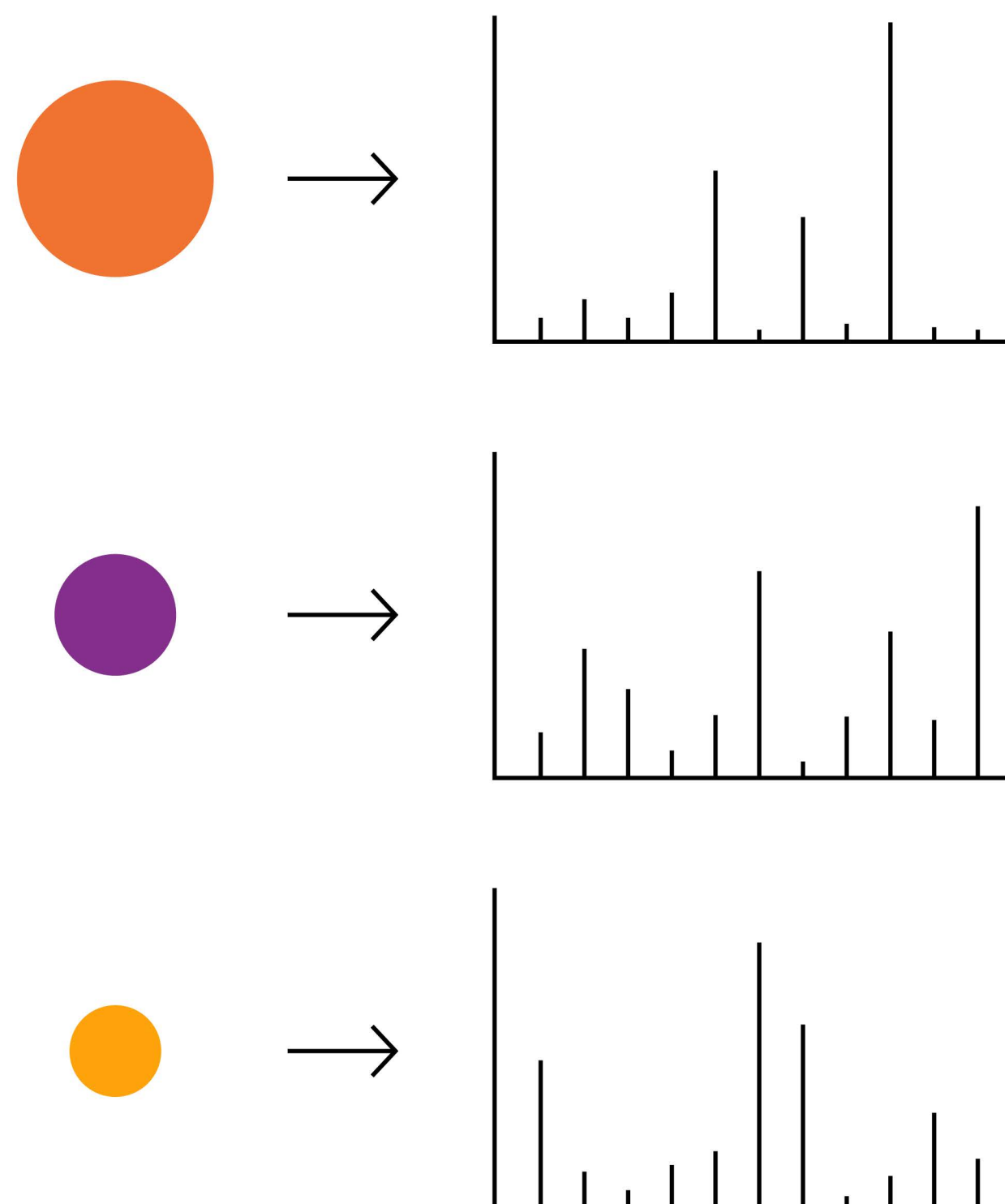
## 2. SEPARATION

A Gas Chromatograph on the front of a Mass Spectrometer separates an unknown sample into individual targets



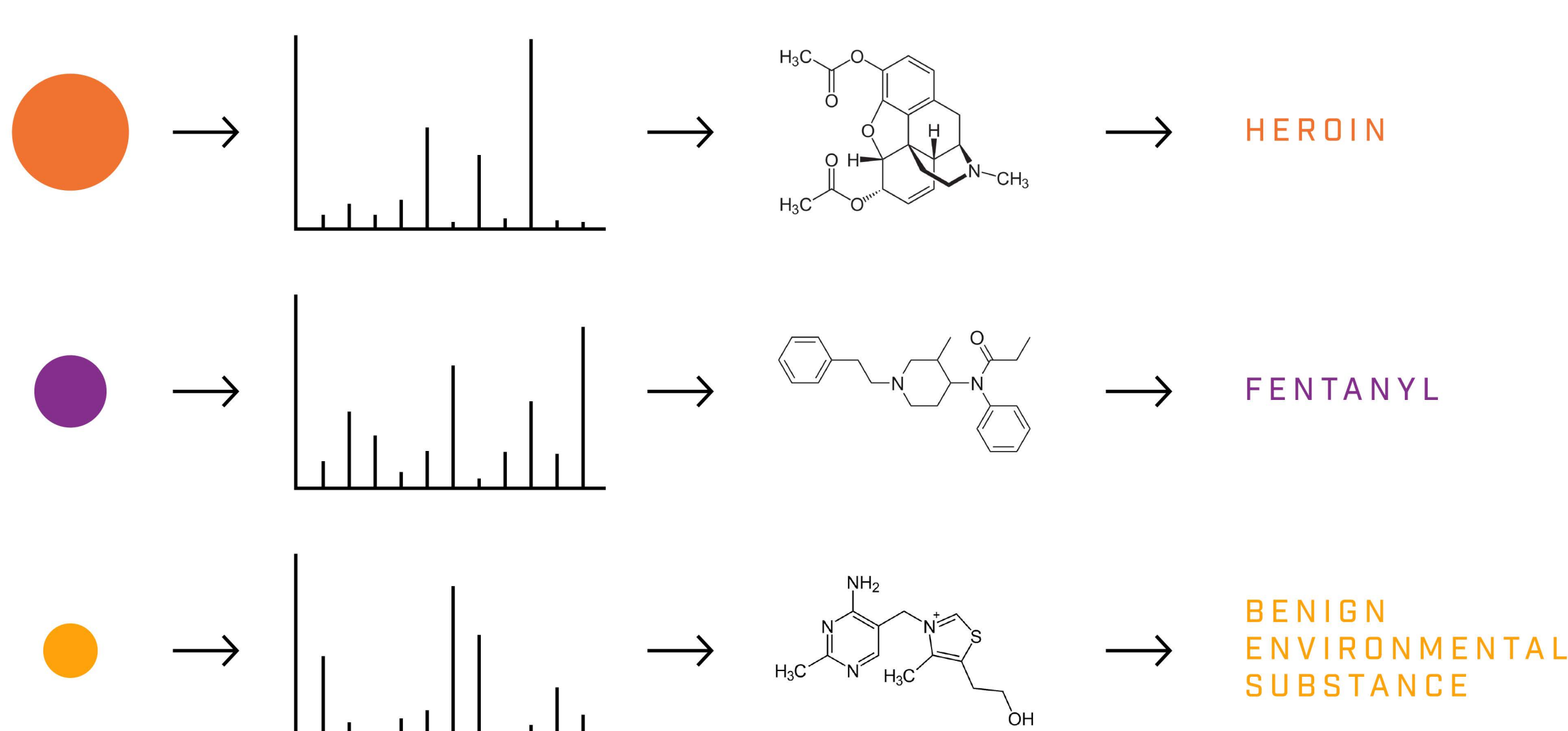
## 3. ANALYSIS

Each separated target is analyzed in the Mass Spectrometer and "chemical fingerprints" are determined



## 4. IDENTIFICATION

Each "chemical fingerprint" is matched against a library of known targets and their identity is confirmed

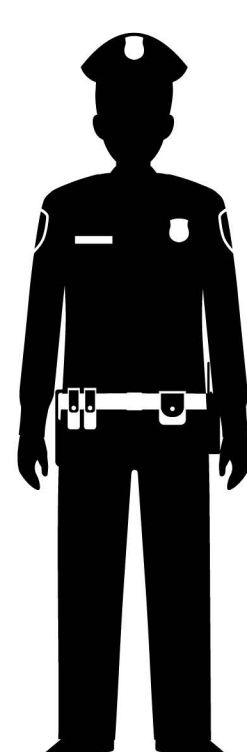


## 5. ACTION

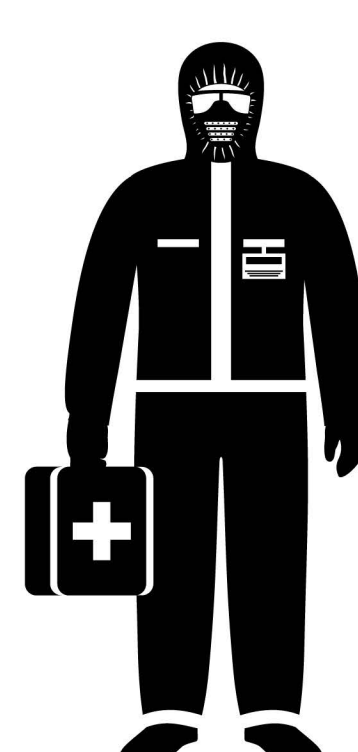
Confirmatory identification provides actionable information to guide emergency responders and professionals in determining the appropriate next steps.



ENVIRONMENT REMEDIATION



INTELLIGENCE GATHERING



MEDICAL ATTENTION