





Impairment Testing
Reinvented for the Workplace



# Are Your Employees Fit For Duty, To Drive, Operate Machinery, and Make Critical Decisions?

Impairment Science, Inc's **Druid Enterprise**, applies neuroscience research to measure performance impairment in the workplace.

Druid Enterprise is designed to measure impairment from any cause, including from drugs, alcohol, fatigue, illness, and injury.

The test records 100s of neurophysiological indicators to detect impairment in just 3 minutes



The app works on both iOS and Android smartphones and tablets.





### The Growing Need for Workplace Safety

Workplace safety has traditionally focused on improving the physical workplace and general working conditions. Now, with expanding legalization of marijuana and growing use of illicit drugs, the greatest threat to employee safety and employers' legal liability is workplace drug use.

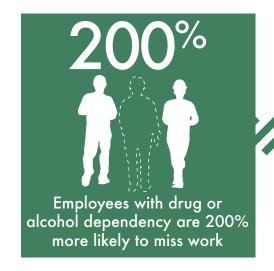
#### Employees under the influence of legal, illegal or prescription drugs have slower reflexes and impaired balance.

Impaired physical coordination, mental acuity and decision-making results in inefficient or incompetent work, reducing productivity and exposing employees - and their co-workers - to far greater risk of injury or even death.

#### Problem of drugs in the workplace:







# Testing for impairment *instead of drug use* represents a paradigm shift in worker safety

**Testing for impairment due to alcohol** by measuring chemicals in blood, breath, sweat, or saliva to assess impairment generally works because how much alcohol is in the body is directly related to how impaired someone is.

Conventional testing, however, doesn't work with certain drugs, like marijuana. The psychoactive drug in marijuana (cannabis), THC, remains in the body for three weeks or more after consumption but the impairment THC causes lasts for only a couple of hours. Testing for evidence of marijuana use instead of impairment unfairly penalizes workers who are in fact fit for duty. From a safety standpoint, your concern should be impairment, not drug use.

To protect your employees and your business, you should test for evidence of *impairment*.

### How Druid Enterprise is Different

Druid is a phone app. No needle stick.

No urine collection. No spit, sweat or breath test.

There are many advantages:

• Inexpensive - Costs *less* per employee for 365 days of testing than a single day's multi-panel drug test

• Fast - Is completed and scored in 3 minutes

Convenient - Avoids employee travel and lost time from work

 Efficient - Allows testing in any amount - monthly, weekly, daily or even multiple times per day

• Easy-to-monitor - Records, tracks and reports results with a convenient management console to facilitate analysis and follow-up

Drugs, alcohol, fatigue, injury and illness all degrade reaction times and balance.

This is exactly what Druid does: it measures reaction time, and balance.

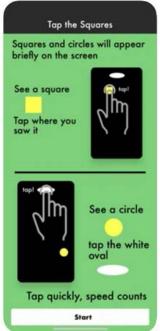


- The app takes several hundred measurements of key neurophysiological indicators while performing divided attention tasks:
  - Reaction time
  - Hand-eye coordination
  - Decision making
  - Time estimation
  - Balance
- The data is statistically integrated to calculate a total impairment score that can be compared to the user's baseline score
- The app's accuracy was confirmed by researchers at The Johns Hopkins University School of Medicine
- The app is widely used in the scientific community to study the impact of impairment

## Druid Enterprise – How It Works

The app operates like a video game, with 4 tasks that take only 3 minutes.





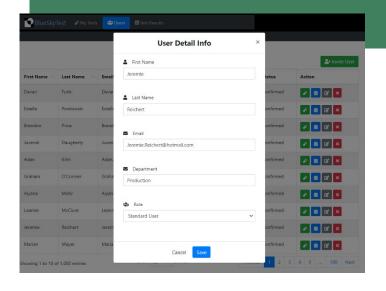


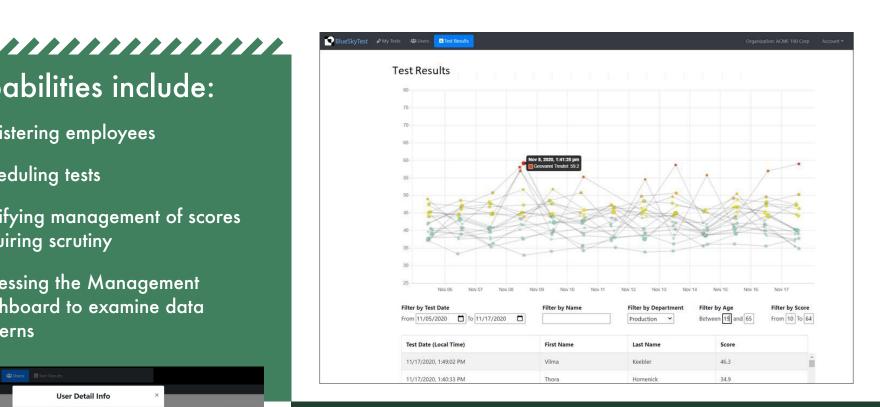
# Druid Enterprise – Management Console

Administrative controls that facilitate your company or organization's human resources protocols

#### Capabilities include:

- Registering employees
- Scheduling tests
- Notifying management of scores requiring scrutiny
- Accessing the Management Dashboard to examine data patterns





#### Reports in graph or table form:

- Any employee's score for any specific date
- Scores of any employee or group of employees over any period of time
- Scores of employees by age or gender over a period of time
- Scores for the entire organization

# The Science Behind Druid Enterprise

"A novel mobile device application, DRUID, was the most sensitive measure of impairment when compared to the other cognitive performance tasks administered (i.e., the DSST, DAT, and PASAT) as well as several common field sobriety tests (i.e., the WT, OLS and MRB)."

— Dr. Tory Spindle and Dr. Ryan Vandrey, The John Hopkins University School of Medicine



"The present studies suggest that the underlying psychomotor functions measured by DRUID are sensitive to impairment that occurs immediately after cannabis consumption, as well as to the performance rebound that appears to occur 1 hour after use."

- Dr. Hollis C. Karoly and Dr. Cinnamon Bidwell, University of Colorado Boulder



1035 Cambridge Street, Suite One • Cambridge, MA 02141

Contact us to get started:

Email: info@impairmentscience.com • Phone: 617-612-5800