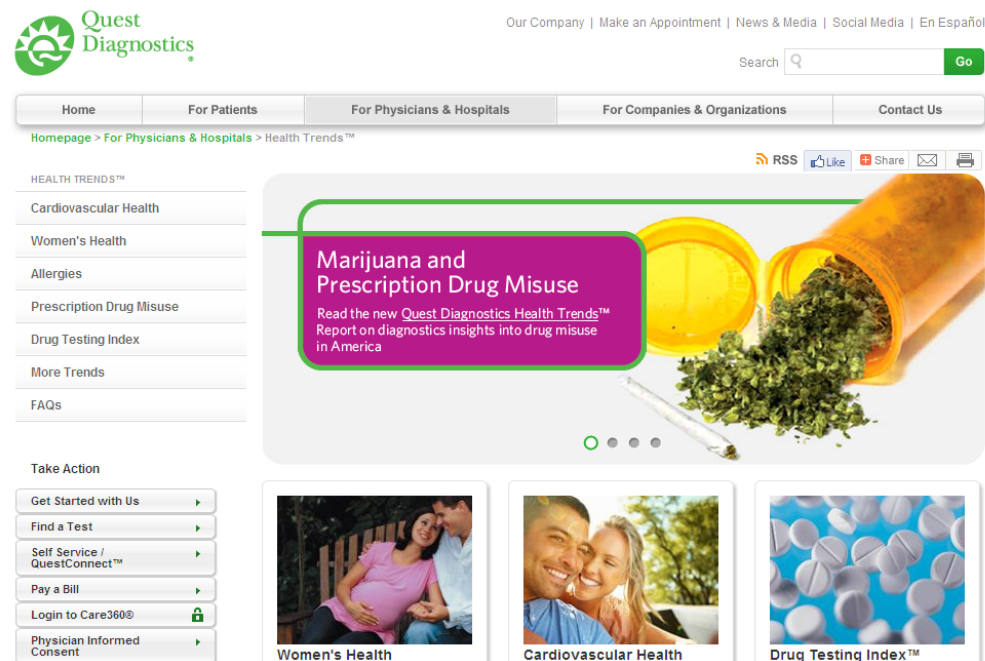


Drug Use Statistics in the United States: General Society and Workplace

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Employer Solutions
Quest Diagnostics Incorporated

Agenda

- Background / Data Sets
- Highlights from most recent data set
- Comparison between selected data sets
- Questions



Data Sets

- Quest Diagnostics Drug Testing Index™ (DTI)
 - <http://www.QuestDiagnostics.com/DTI>
- National Survey of Drug Use and Health (NSDUH)
 - <http://www.samhsa.gov/data/NSDUH.aspx>
- National Forensic Laboratory Information System (NFLIS)
 - <https://www.nflis.deadiversion.usdoj.gov/Default.aspx>

DTI Key Findings from the Full Year 2013 Data

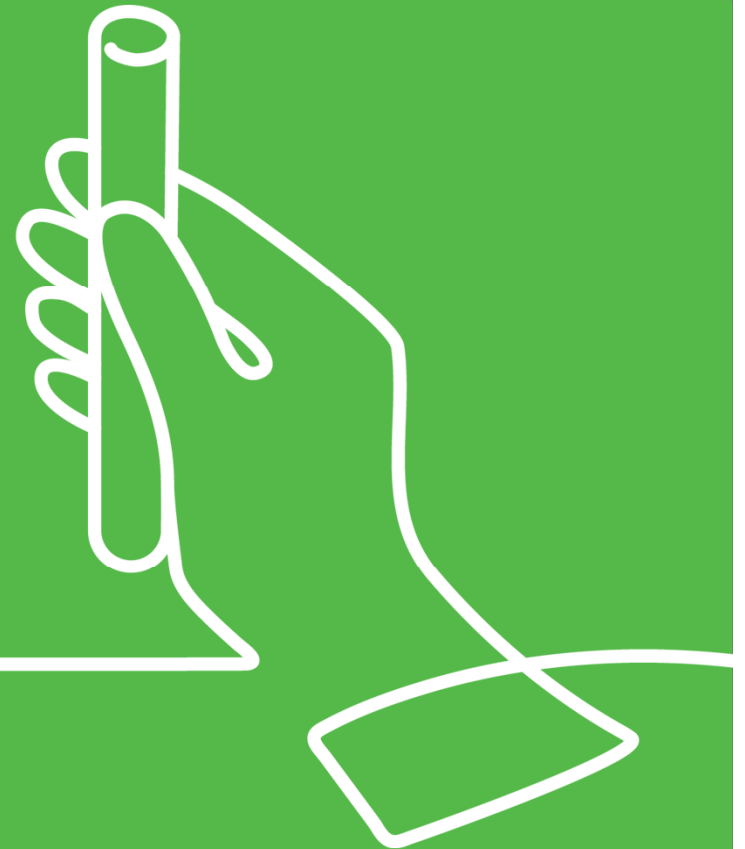
- The percentage of positive drug tests among American workers has increased for the first time in more than a decade, fueled by a rise in marijuana and amphetamines positivity
- Marijuana positivity increased 6.2 percent nationally in urine drug tests, but by double digits in Colorado and Washington
- Detection of marijuana continues to increase significantly in oral fluid testing
- Methamphetamine positivity increased across all drug testing specimen types and is at its highest level since 2007
- Amphetamine continues its year-over-year increase in detection rates



NSDUH Highlights 2013 – Overall Illicit Drug Use

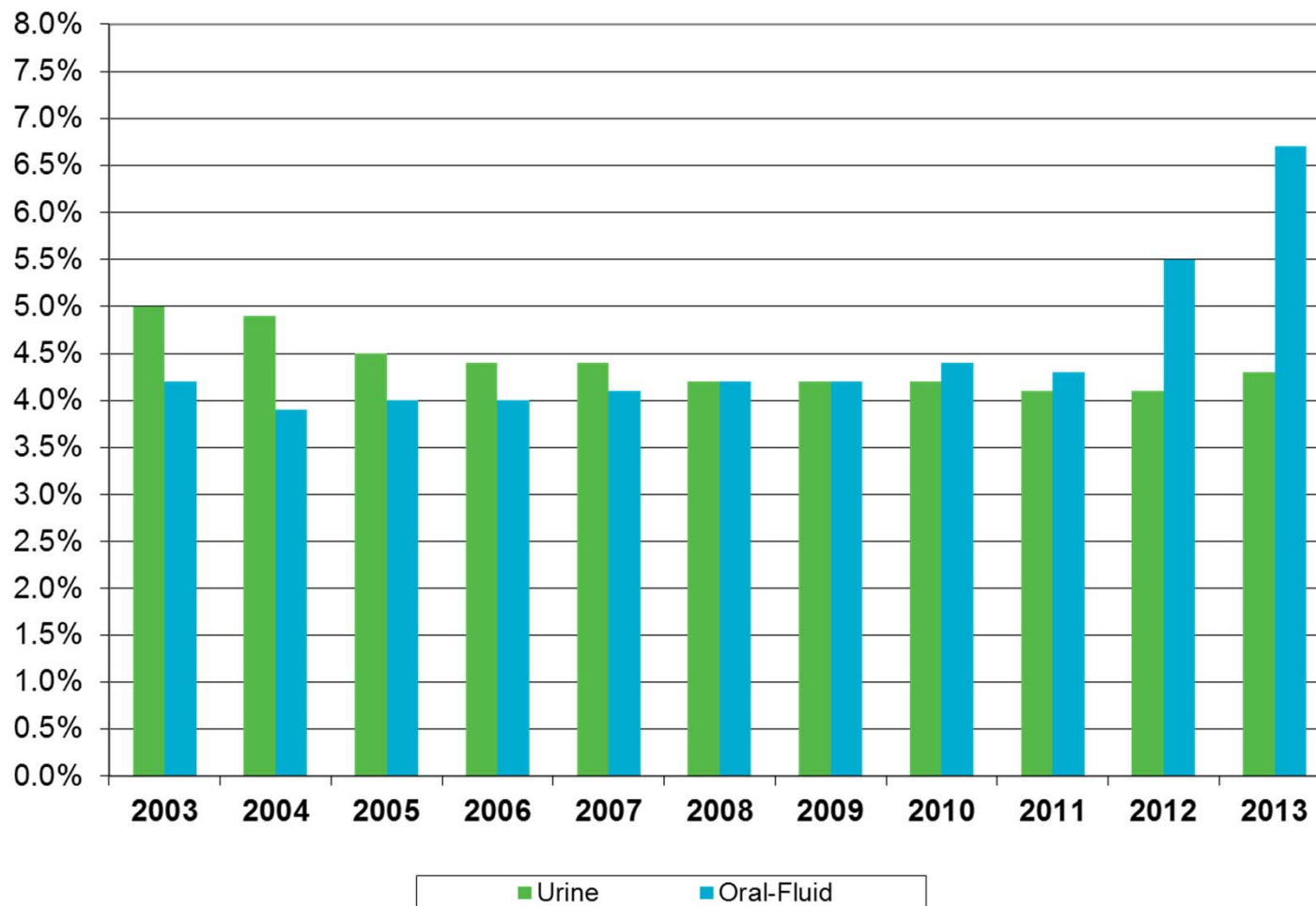
- In **2013**, an estimated **24.6 million** Americans aged 12 or older were “current” (used during the month prior to the survey) illicit drug users
 - Represents **9.4 percent** of the population aged 12 or older
 - Includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics (pain relievers, tranquilizers, stimulants, and sedatives) used non-medically.
- The rate of current illicit drug use among persons aged 12 or older increased from **8.1 percent** in **2008** to **9.4 percent** in **2013**. The rate in 2013 was similar to the rates in 2010 and 2012 (8.9 percent & 9.2 percent, respectively), but it was higher than the rates in the years 2002 through 2009 and 2011 (range: 7.9% to 8.7%).
- Among **unemployed** adults aged 18 or older in **2013**, **18.2 percent** were current illicit drug users, which was higher than the rates of **9.1 percent** for those who were **employed full time** and **13.7 percent** for those who were employed part time. However, most illicit drug users were employed. Of the 22.4 MM current illicit drug users aged 18 or older in 2013, 15.4 MM (68.9 percent) were employed either full or part time.
- The percentage of adults employed full time who were current illicit drug users increased between 2011 (8.0 percent) and 2012 (8.9 percent) and was similar in 2013 (**9.1 percent**)

Overall Rates



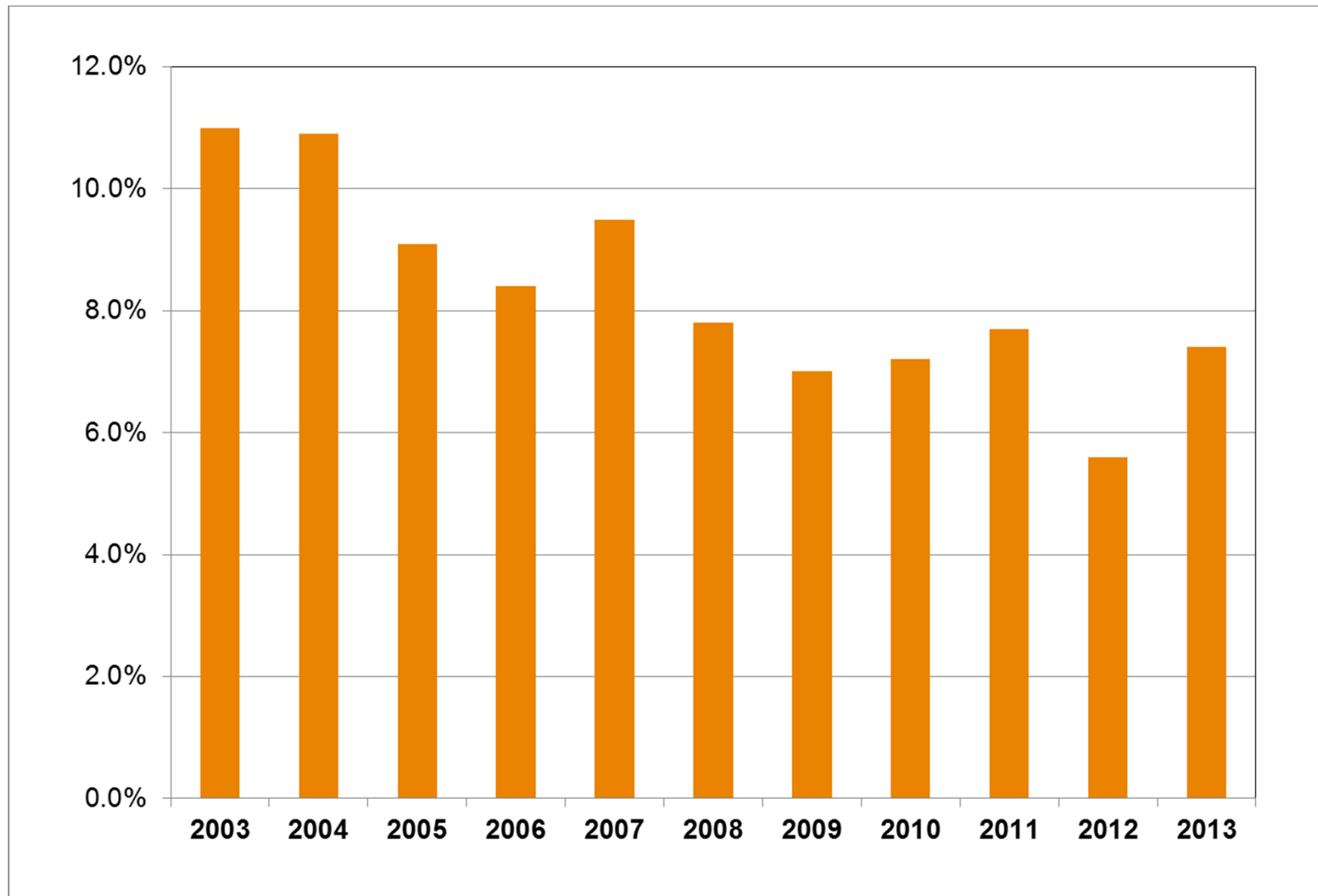
Overall Positivity Rates

(General Workforce)



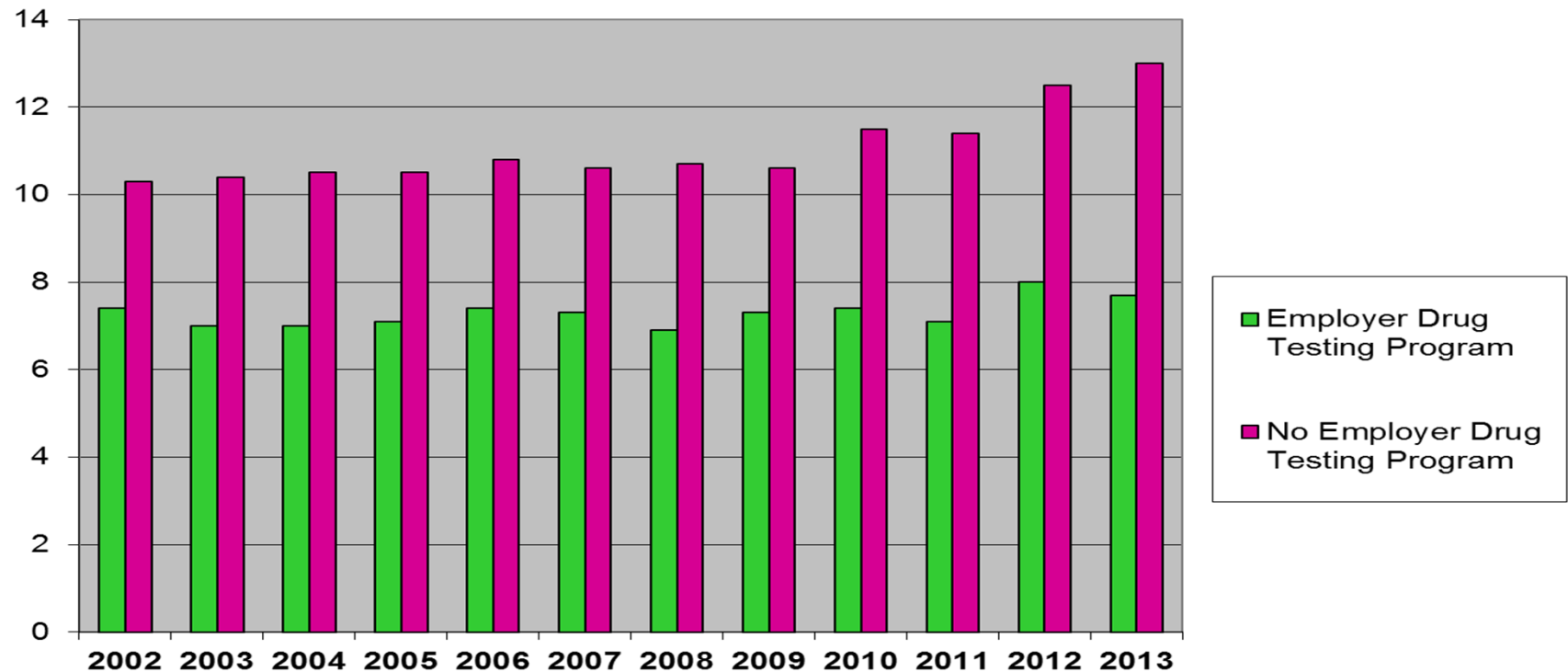
Overall Positivity for Hair Testing

(General Workforce)



Illicit Drug Use in Previous 30 Days

(NSDUH)



Source: United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Office of Applied Studies. National Survey on Drug Use and Health, 2002-2011. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]

Rates by Drug Category



NSDUH Highlights 2013 – Specific Illicit Drug Use

- **Marijuana:**

- Marijuana remains the most commonly used illicit drug. In **2013**, there were 19.8 million (**7.5%**) past month (“current”) users. While 2012 and 2013 rates are similar, they are significantly higher than 2002 thru 2011 (range: 5.8 to 7.0%).
- In **2013**, **8.1 MM** persons aged 12 or older used marijuana on **20 or more days** in the **past month**, which was an increase from the **5.1 MM** daily or almost daily past month users in **2005 to 2007**. The number of daily or almost daily users in 2013 represented 41.1 percent of past month marijuana users
- In **2013**, **5.7 MM** persons aged 12 or older used marijuana on a daily or almost daily basis in the **past 12 months** (i.e., on **300 or more days** in that period), which was an increase from the **3.1 MM** daily or almost daily marijuana users in **2006**. The number of daily or almost daily users of marijuana in 2013 represented 17.4 percent of past year users.

- **Cocaine:**

- In **2013**, there were **1.5 MM** current cocaine users aged 12 or older, comprising **0.6 percent** of the population. These estimates were similar to the number and rate in 2009 to 2011 (range: 0.5 to 0.7%), but they were lower than in 2002 to 2007 (range: 0.8 to 1.0%).

NSDUH Highlights 2013 – Specific Illicit Drug Use (Cont'd)

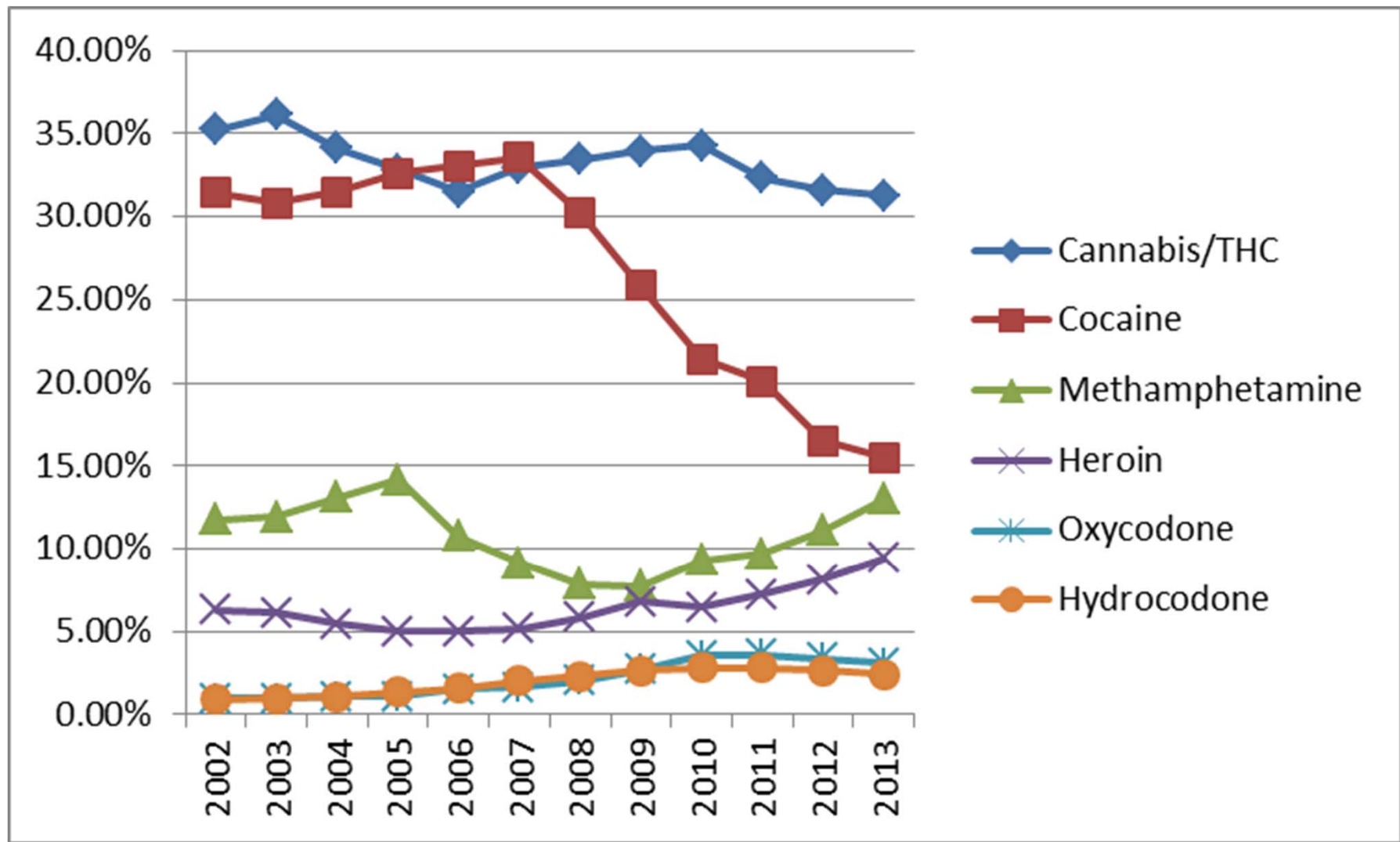
- **Heroin:**

- The number of ***past year*** heroin users increased between 2007 (373,000) and **2013 (681,000)**.
- In **2013**, the number of ***current*** heroin users was 289,000 (**0.1 percent**) which was similar to 2008 through 2012 but higher than 2002 to 2005 (range: 119,000 to 166,000) and 2007 (161,000).

- **Methamphetamine:**

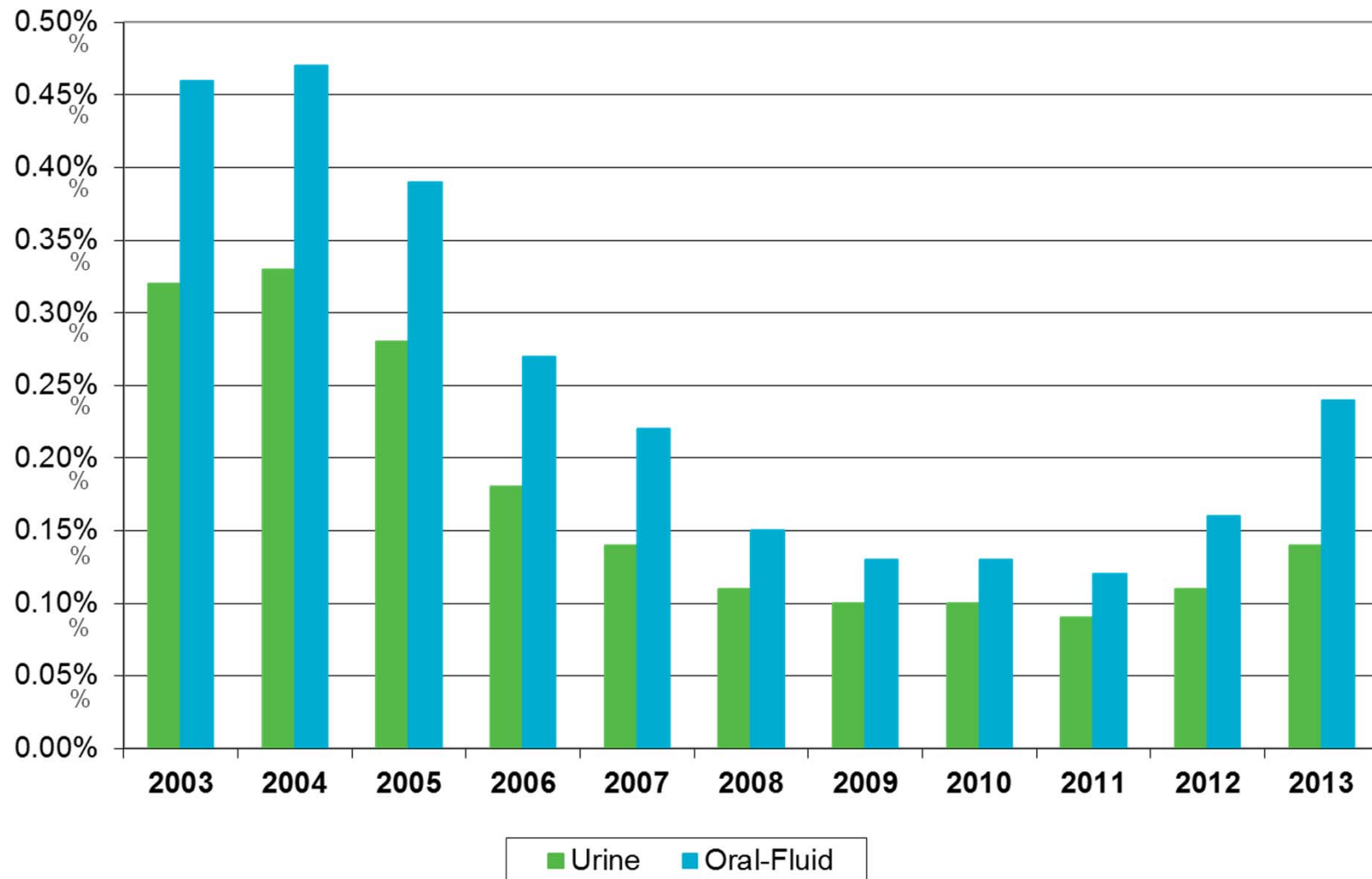
- The number of past month methamphetamine users decreased between 2006 and **2013**, from 731,000 (0.3 percent) to 595,000 (**0.2 percent**).
- The number and percentage of persons aged 12 or older who were current users of methamphetamine in 2013 were similar to those in 2012 (440,000 or 0.2 percent) and in 2007 to 2010 (ranging from 314,000 to 530,000 and from 0.1 to 0.2 percent). However, the number and percentage in 2012 were lower than in 2006 (731,000 or 0.3 percent).

NFLIS Drug Analyses

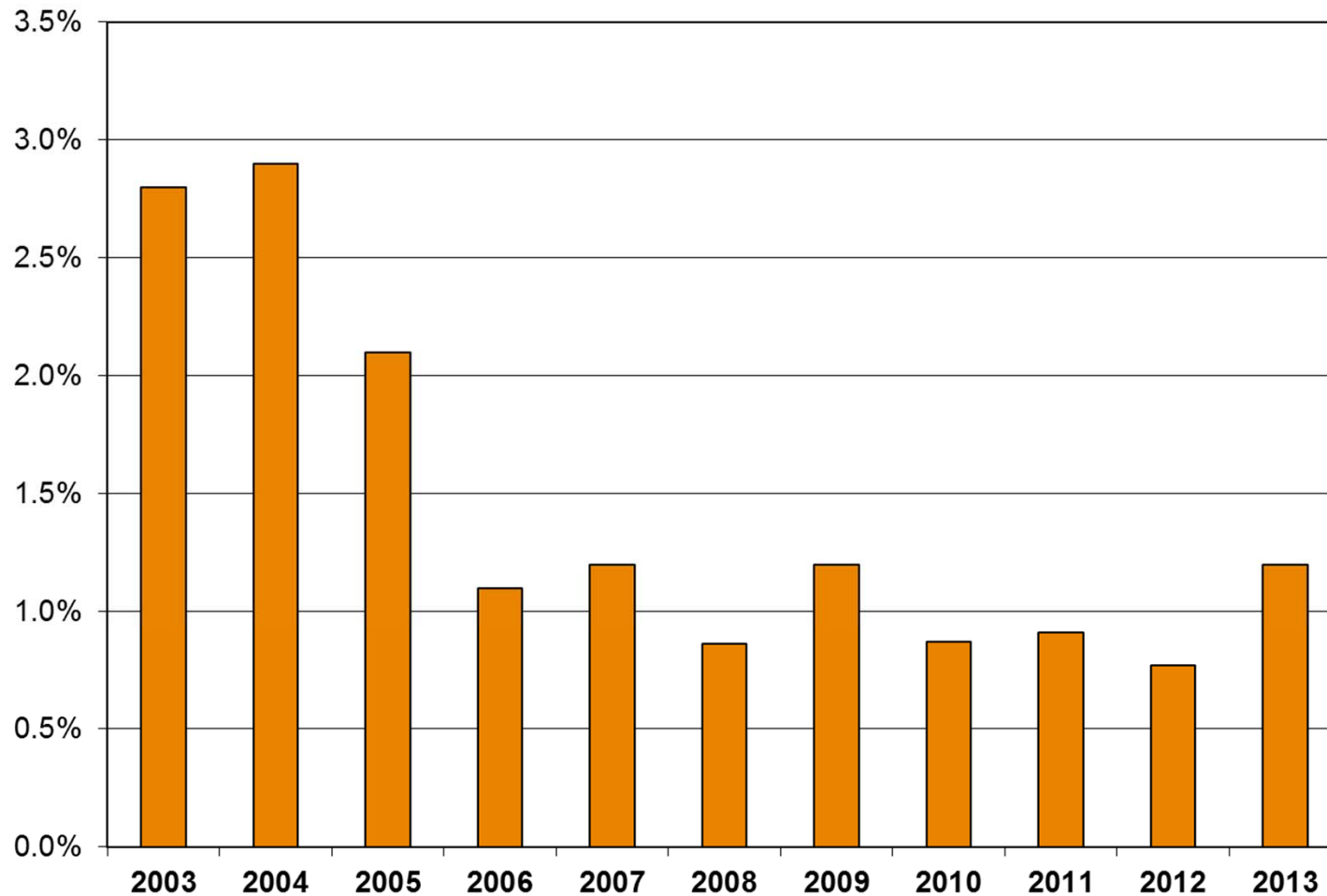


Methamphetamine Positivity Rates

(General Workforce)

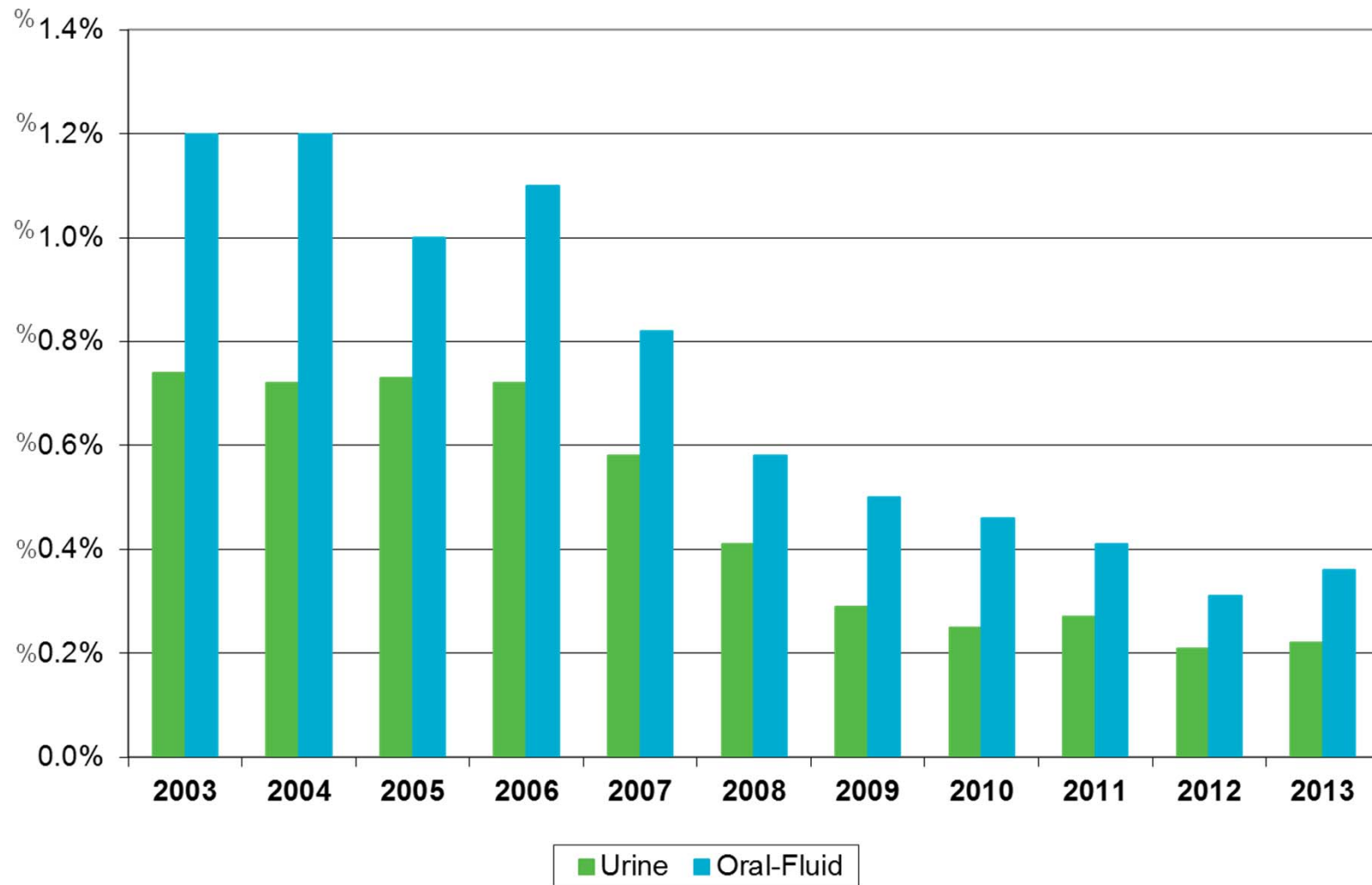


Amphetamine (Methamphetamine) Positivity for Hair Testing (General Workforce)



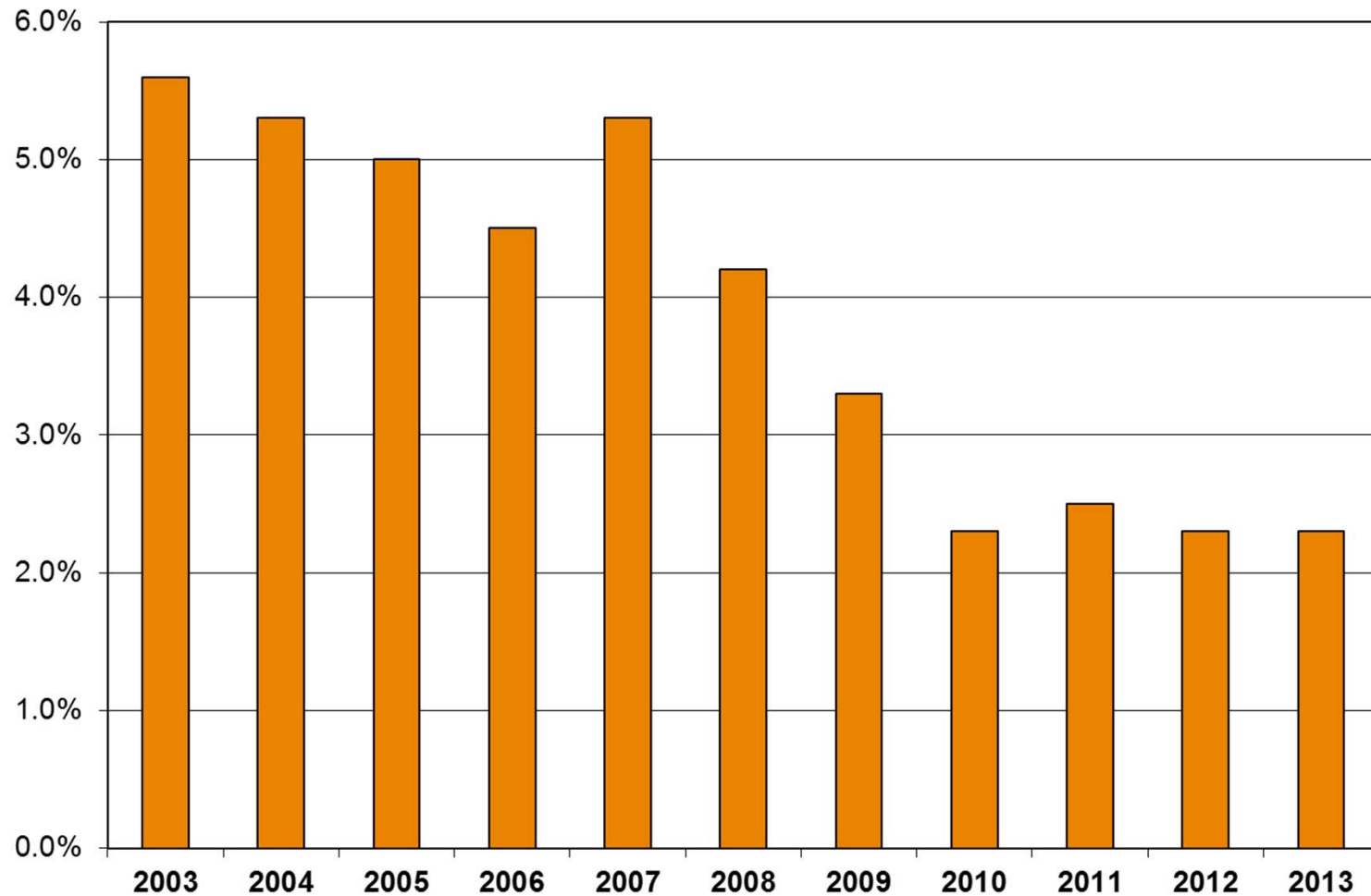
Cocaine Positivity Rates

(General Workforce)



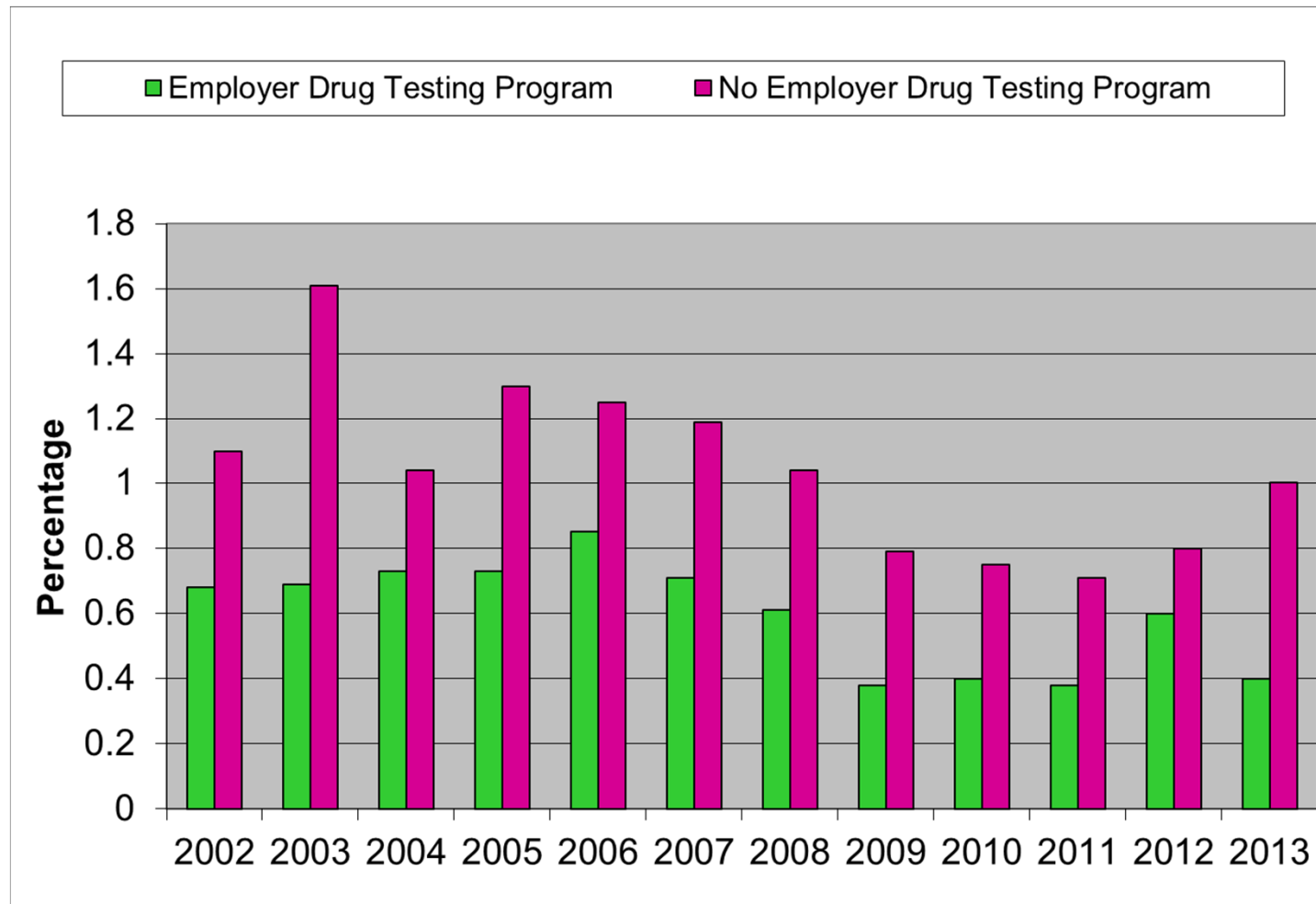
Cocaine Positivity for Hair Testing

(General Workforce)



Cocaine Use in Previous 30 Days

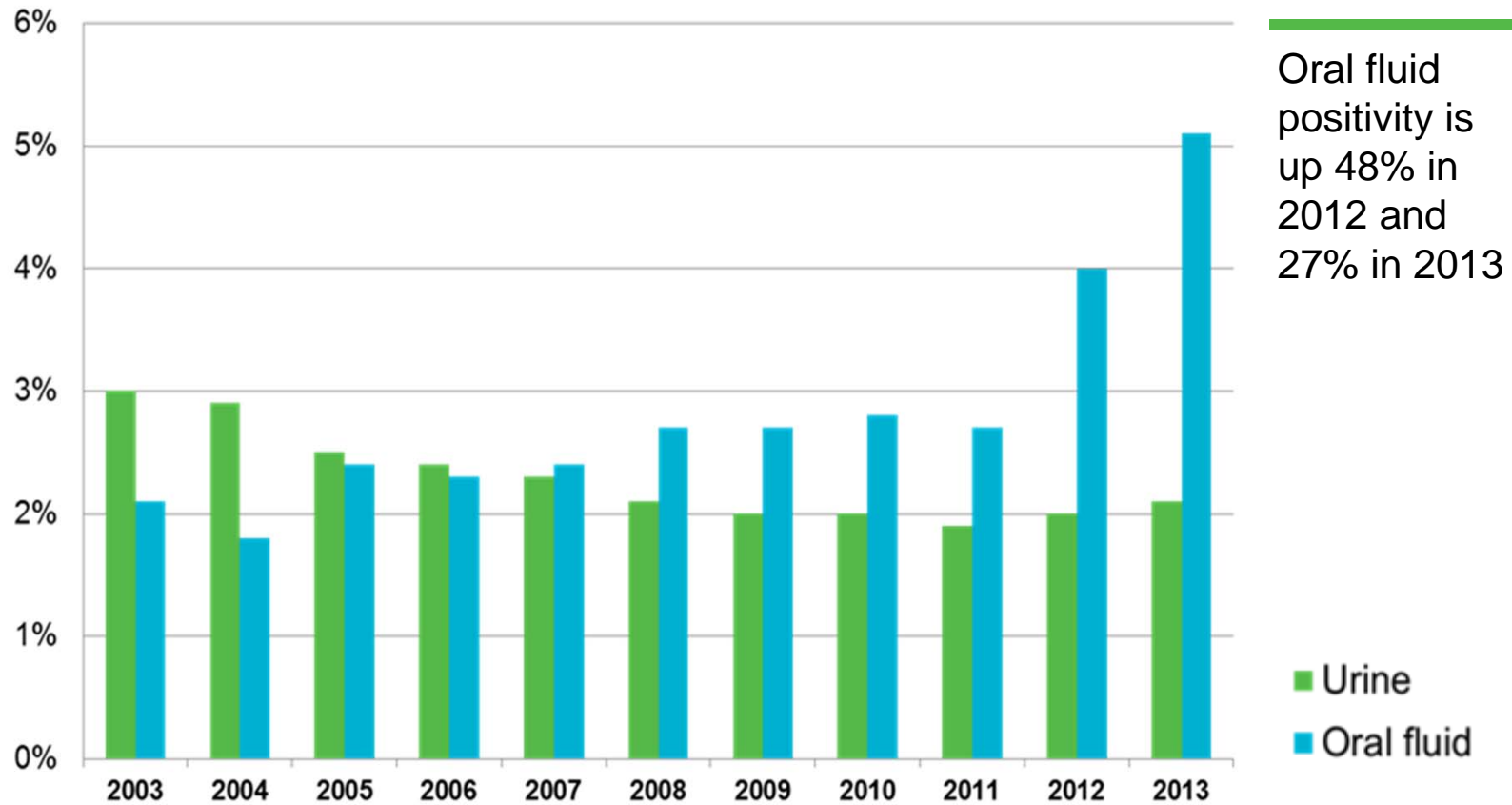
(NSDUH)



Source: United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Office of Applied Studies. National Survey on Drug Use and Health, 2002-2011. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]

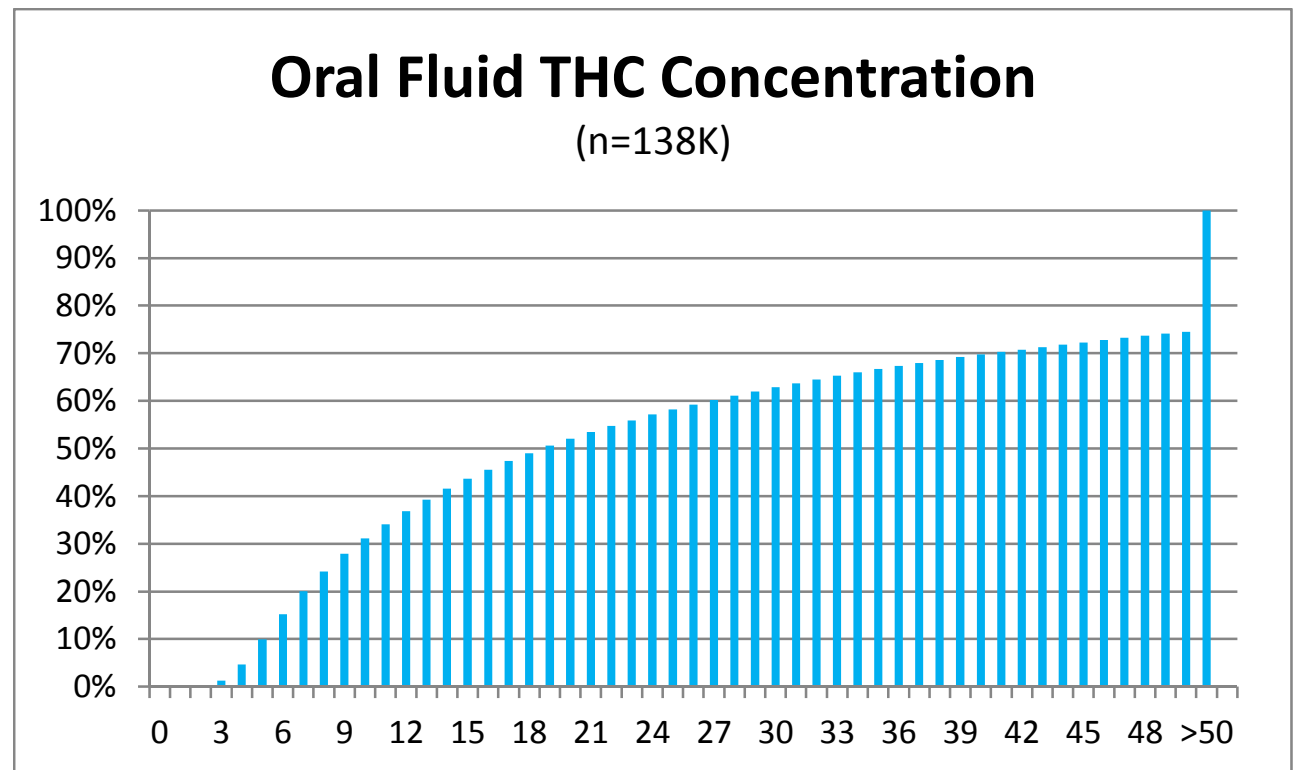
Marijuana Positivity Rates

Urine and Oral Fluid – U.S. General Workforce

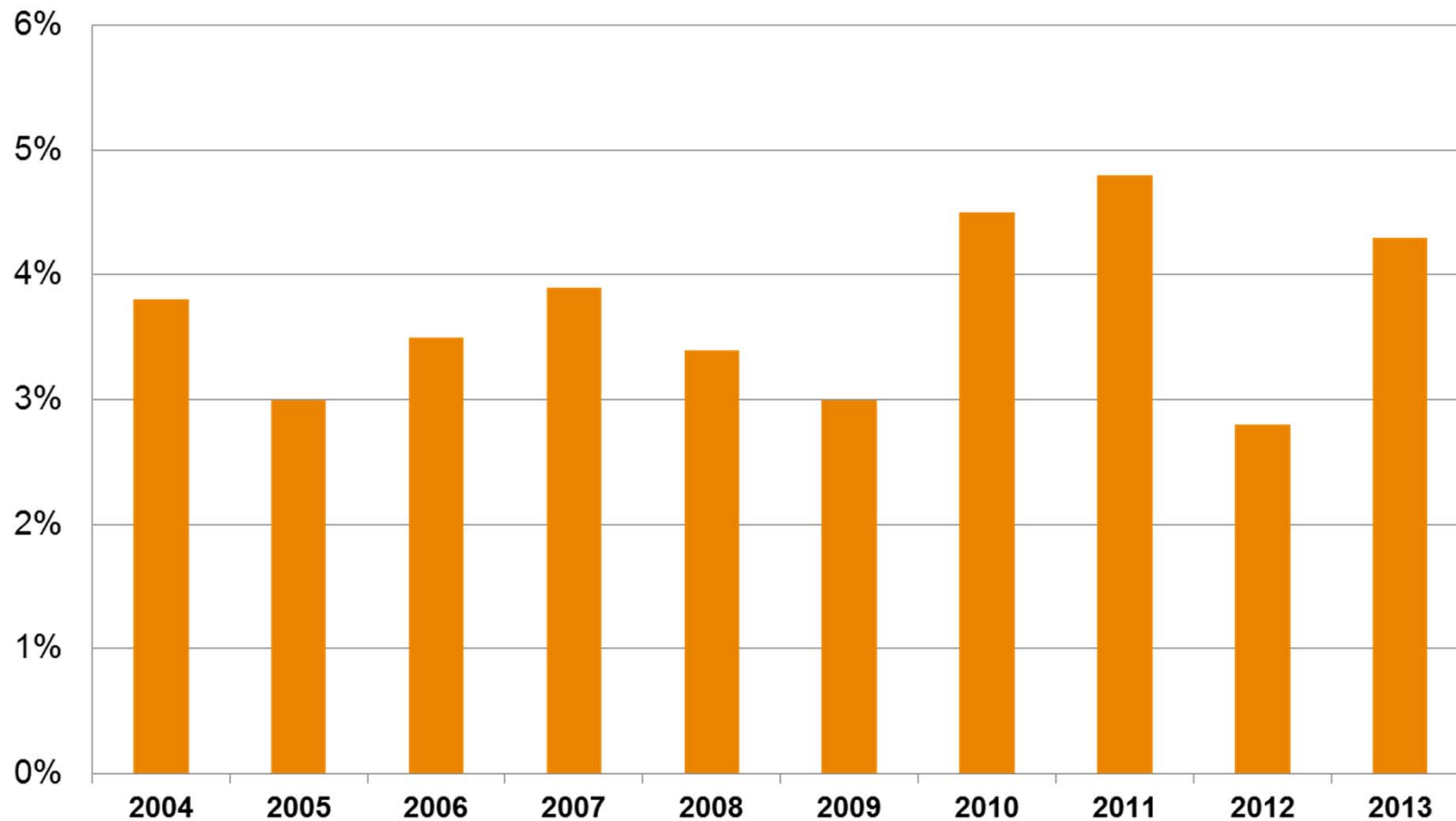


Oral Fluid THC Concentrations

- Data from more than 138,000 Oral-Eze® Oral Fluid THC Confirmations
- Lab-based (Oral-Eze) cutoff = 1.5 ng/mL (Screen cutoff = 3 ng/mL)
- <2 ng/mL – 0.18%
- <4 ng/mL – 4.7%
- <10 ng/mL – 31%
- <15 ng/mL – 43%
- <40 ng/mL – 74%
- POCT cutoff =
40-50 ng/mL



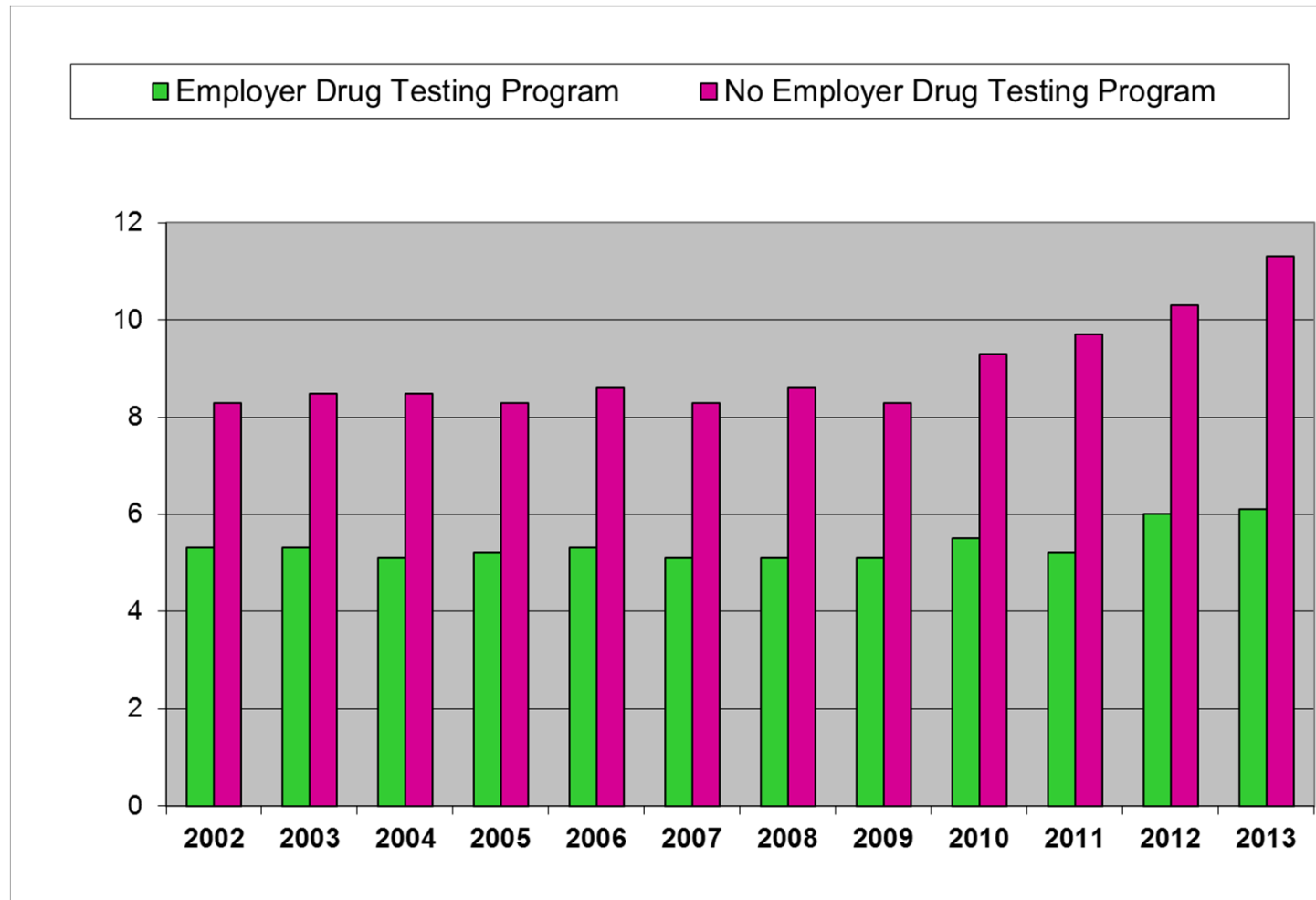
Marijuana Positivity for Hair Testing (*General Workforce*)



Source: Quest Diagnostics Drug Testing Index™

Marijuana Use in Previous 30 Days

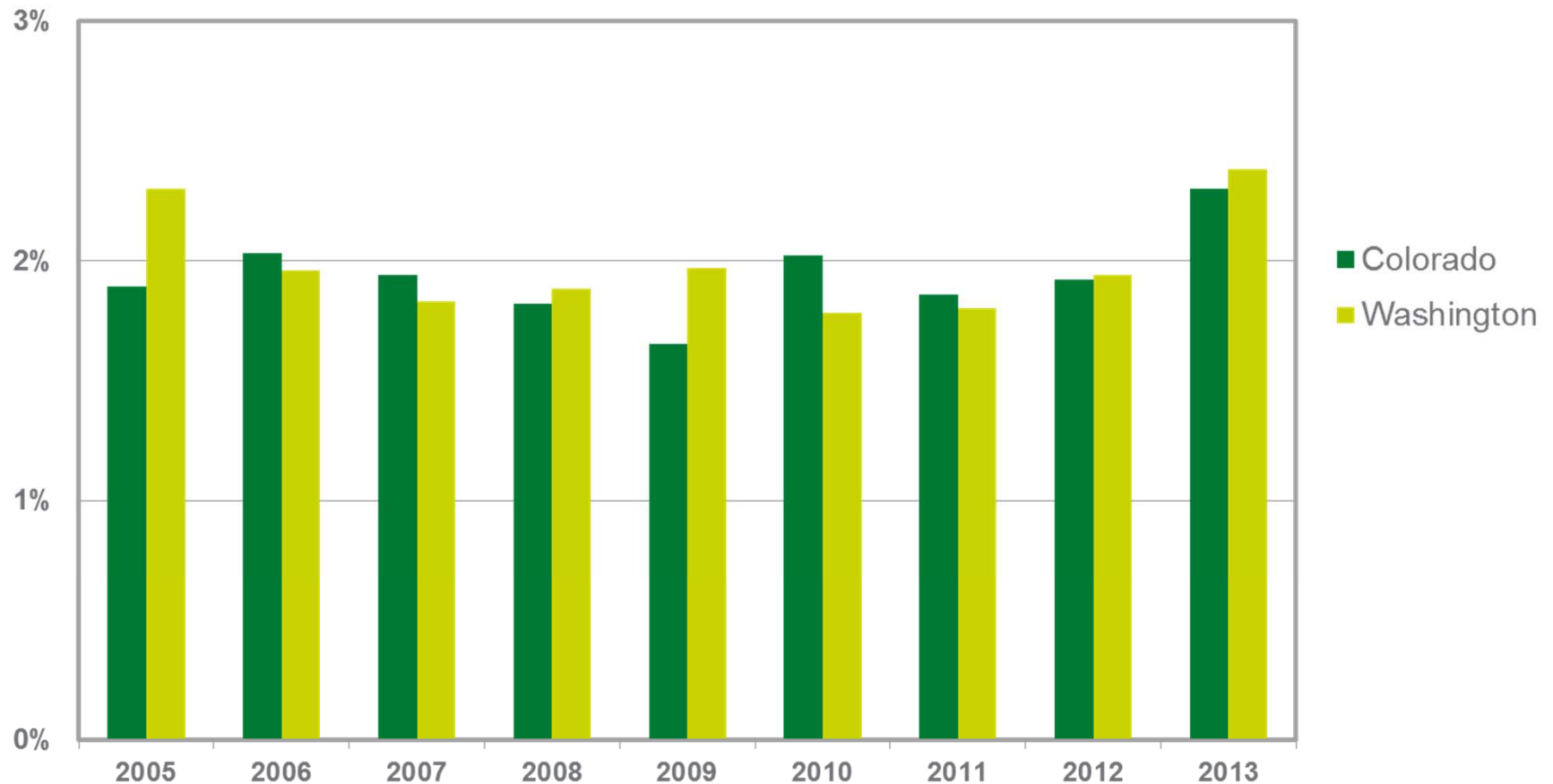
(NSDUH)



Source: United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Office of Applied Studies. National Survey on Drug Use and Health, 2002-2011. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]

Marijuana Positivity in Colorado and Washington

(Urine Drug Tests, U.S. General Workforce)



Questions



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