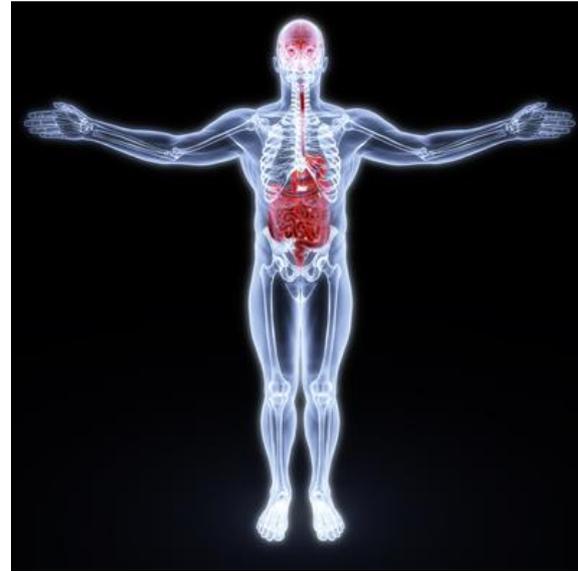


# **Challenges of Marijuana-Related Surveillance: Implications for Monitoring Occupational Health Exposure and Injury**

Bernadette Albanese, MD, MPH  
Tri-County Health Department

In partnership with  
Colorado Department of Public Health and Environment (CDPHE)  
(slides provided by CDPHE)

# Monitoring MJ related outcomes



# *Surveillance Sources in Colorado: Population-based surveys*

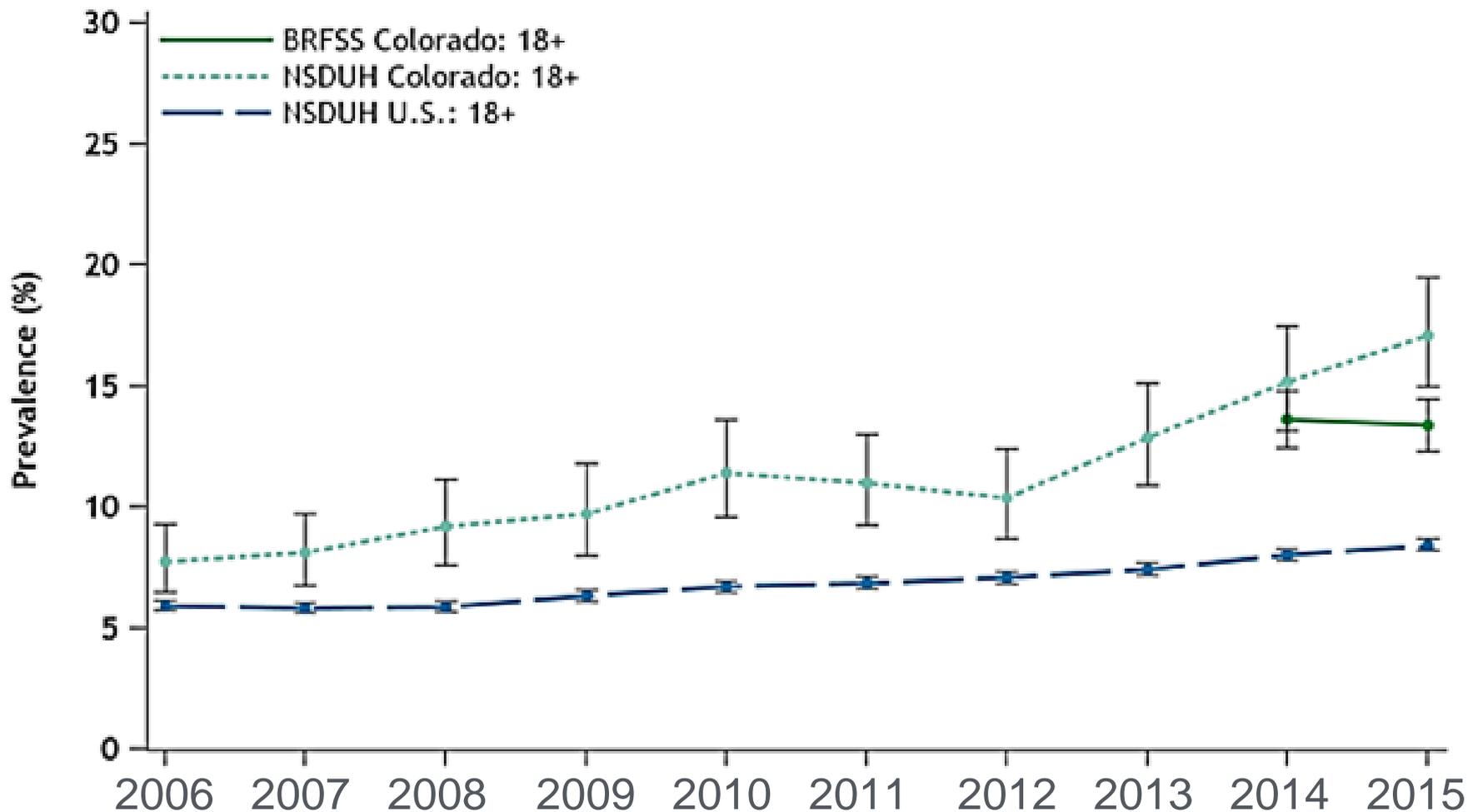
## Behavioral Risk Factor Surveillance System (BRFSS)

- Population survey of adults  $\geq$  18 years
- State added questions on MJ ever & current use, frequency, driving after using, and methods of use

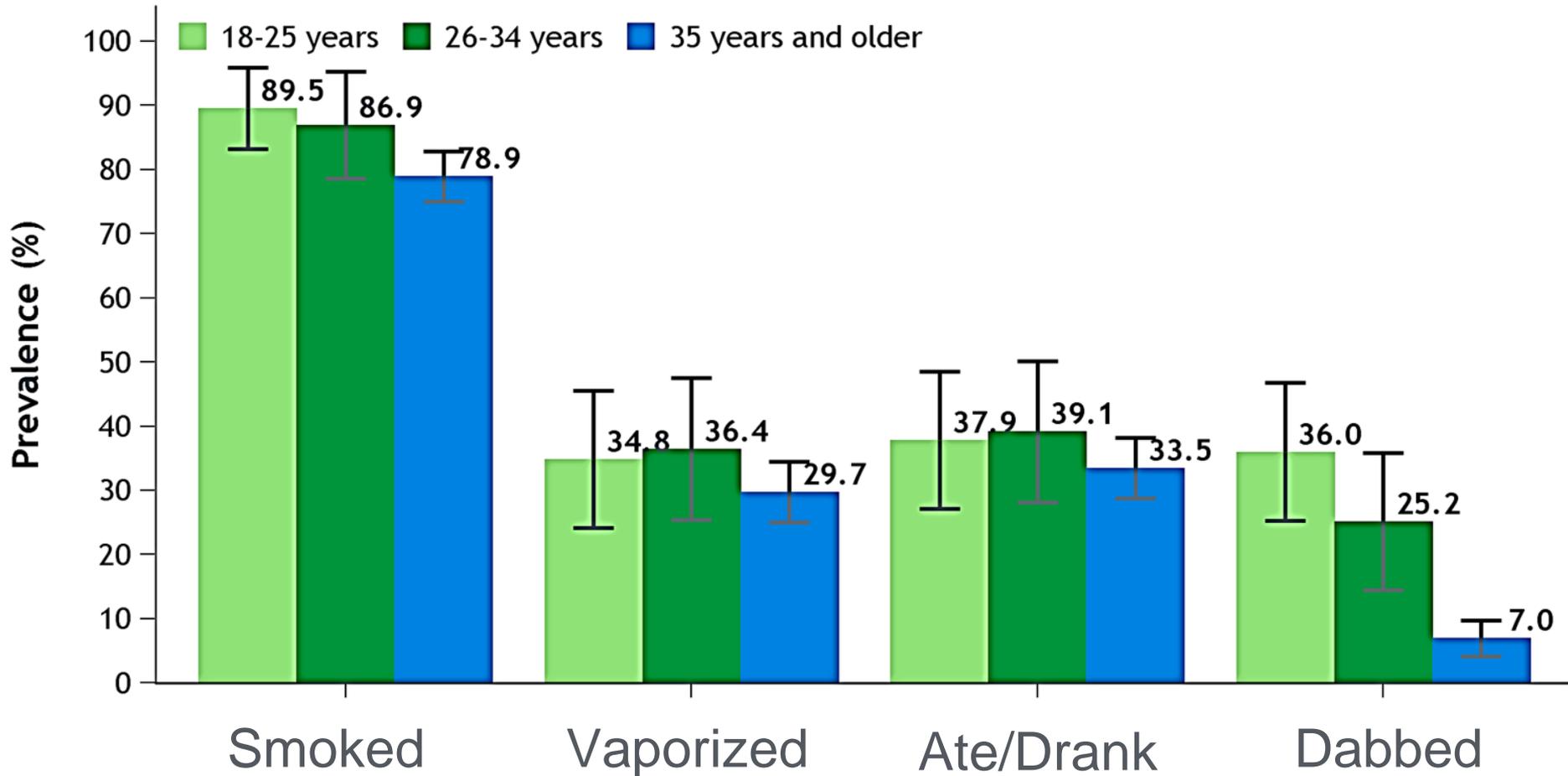
## Child Health Survey

- Follow-up to BRFSS for households with children 1-14 years
- State added questions on use or presence of marijuana in the home, safe storage

# *Current marijuana use among adults, Colorado and U.S.*



# Methods of use among current adult marijuana users in Colorado



# *Population-based surveys for maternal/pediatric exposure*

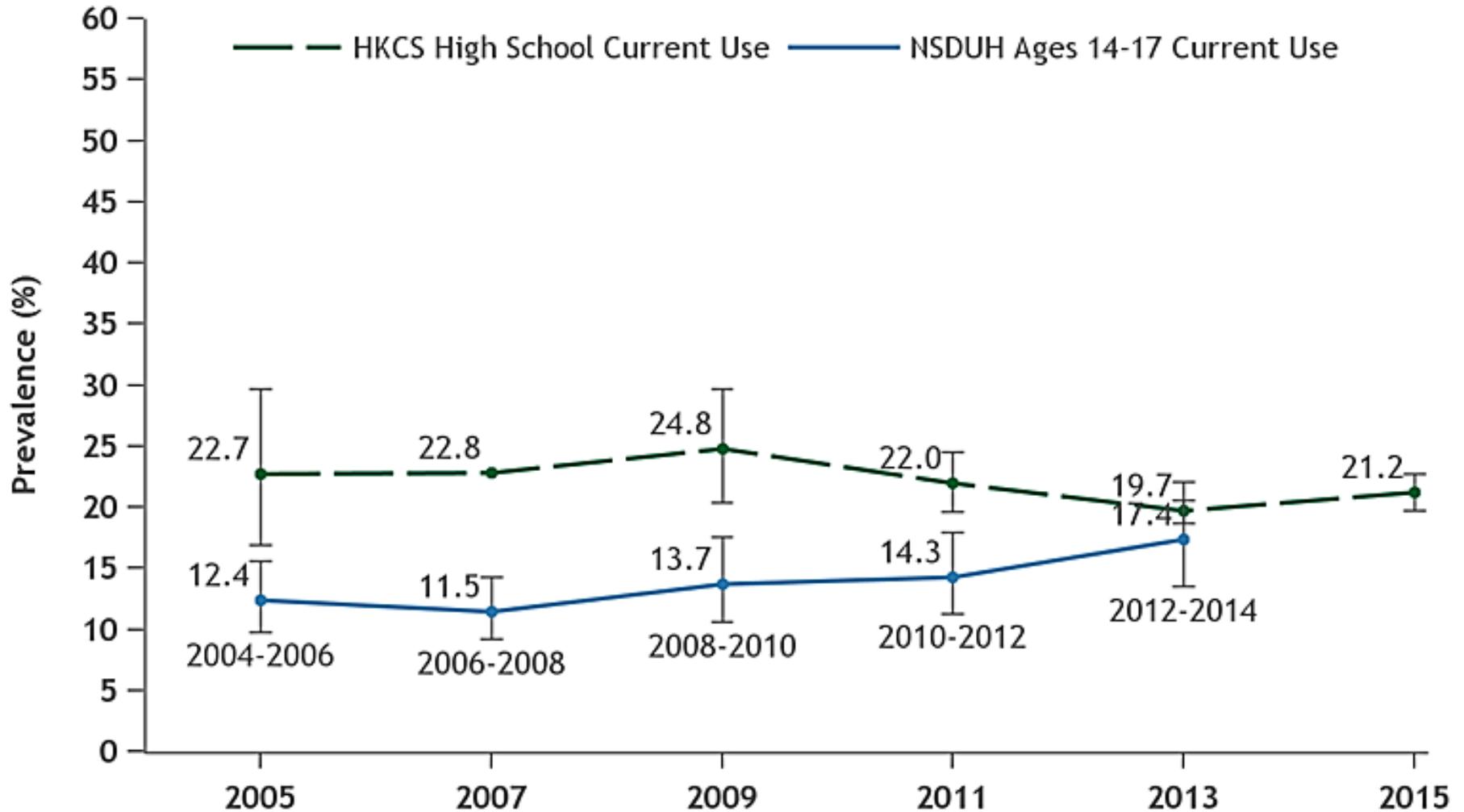
## Pregnancy Risk Assessment Monitoring System (PRAMS)

- Postpartum women
- State added questions on marijuana use before, during, and after pregnancy

## Healthy Kids Colorado Survey (HKCS)

- High school & middle school students
- Marijuana ever & current use, frequency, age of first use, methods of use

# Current Use in High School, Colorado



# *What about MJ-related health effects?*

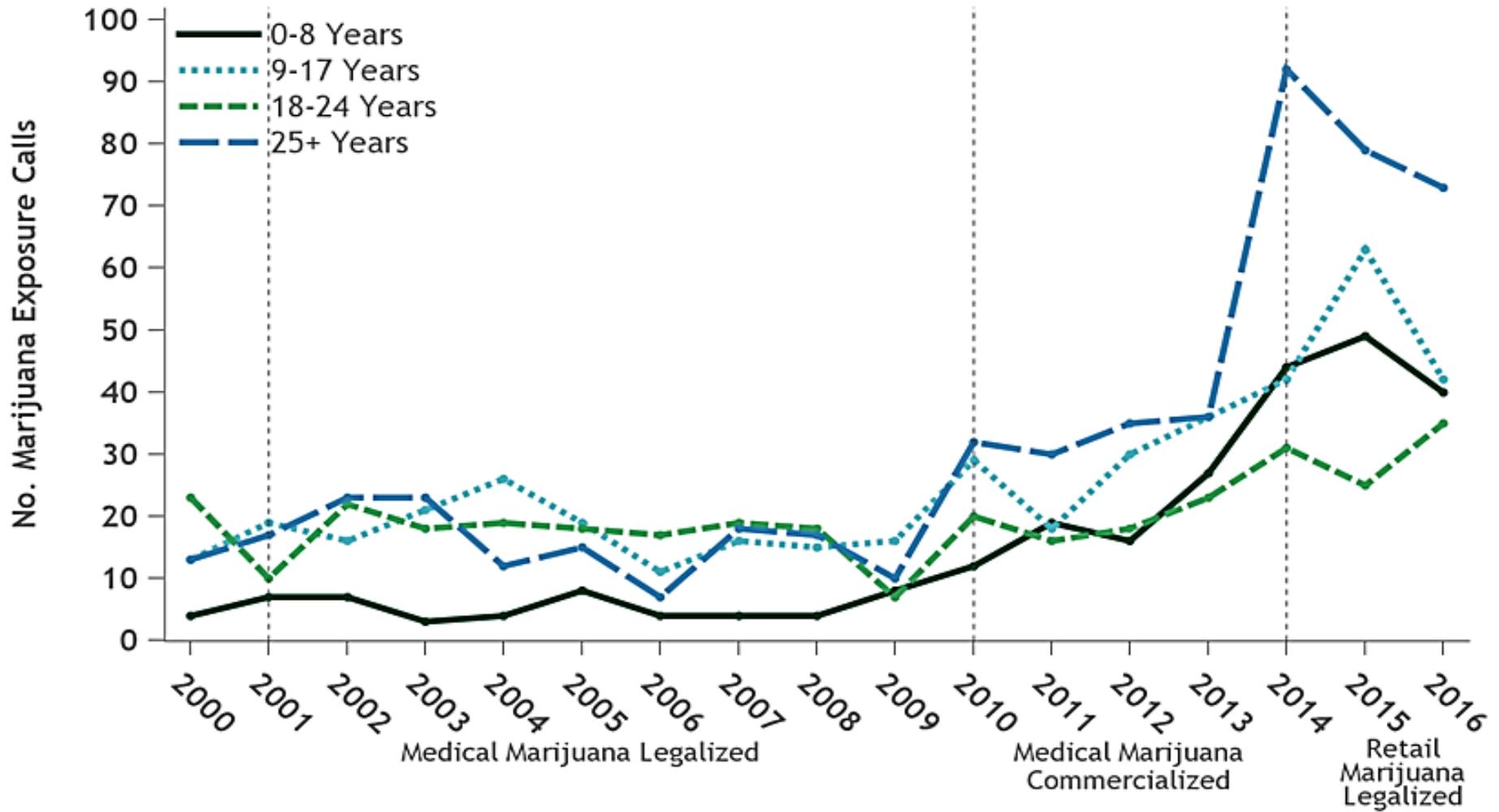
## Colorado Hospital Association (CHA)

- Discharge data on emergency department visits and hospitalizations
- Track events based on ICD9/10 “marijuana-related codes”

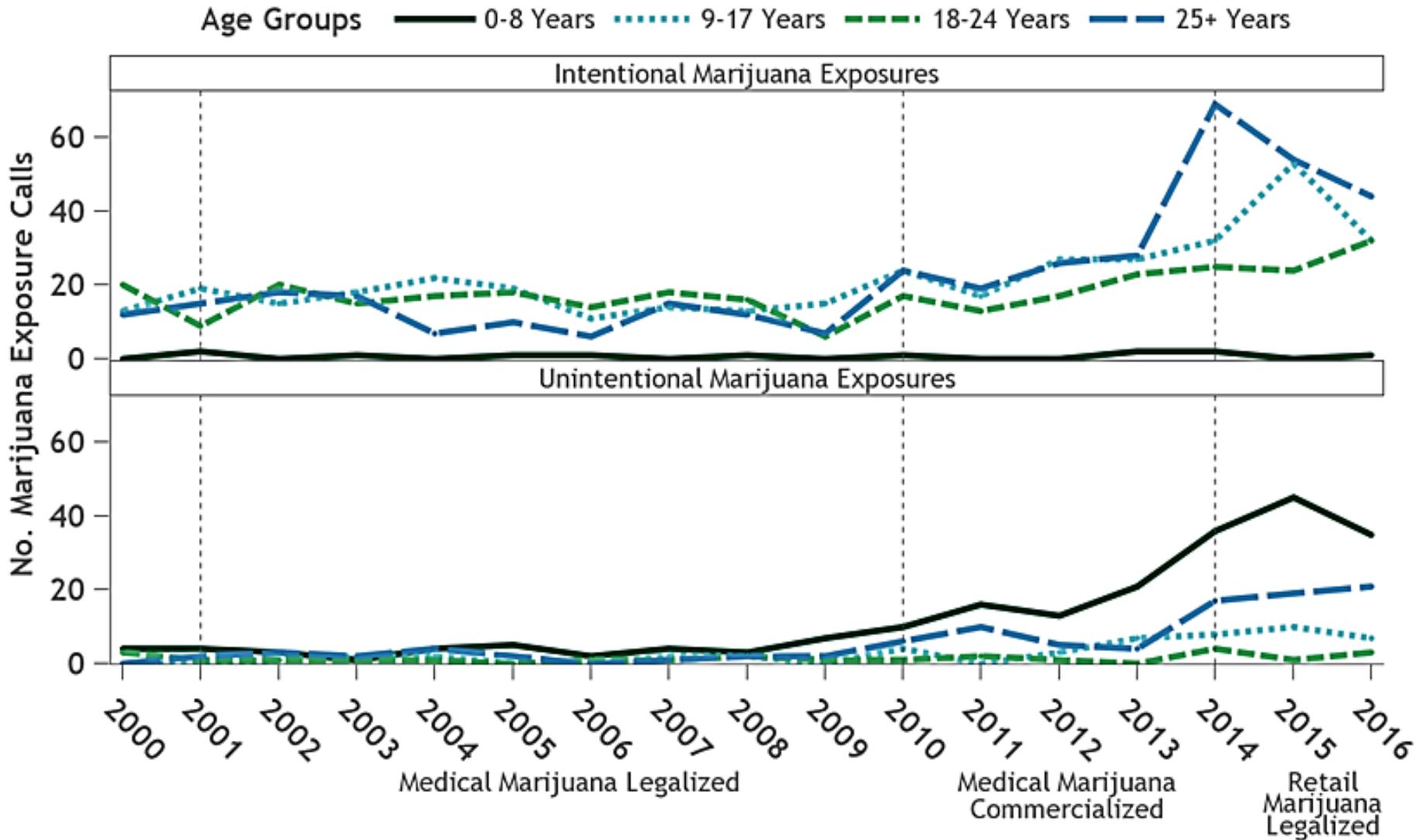
## Rocky Mountain Poison and Drug Center (RMPDC)

- Regional hotline for public or health professionals to call with concerns about an exposure
- Track number of calls about marijuana exposures

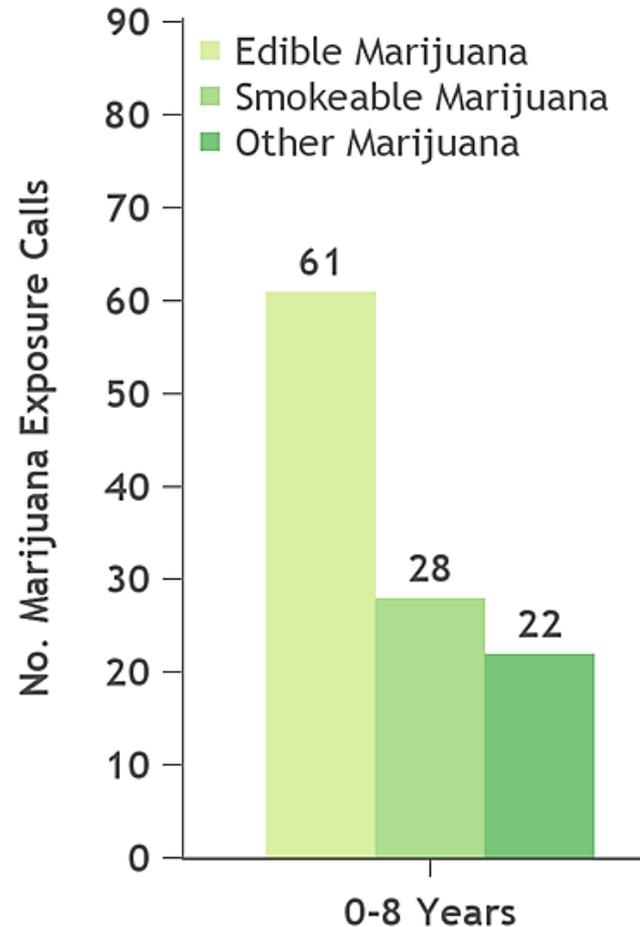
# Calls to CO poison center (RMPDC) by age



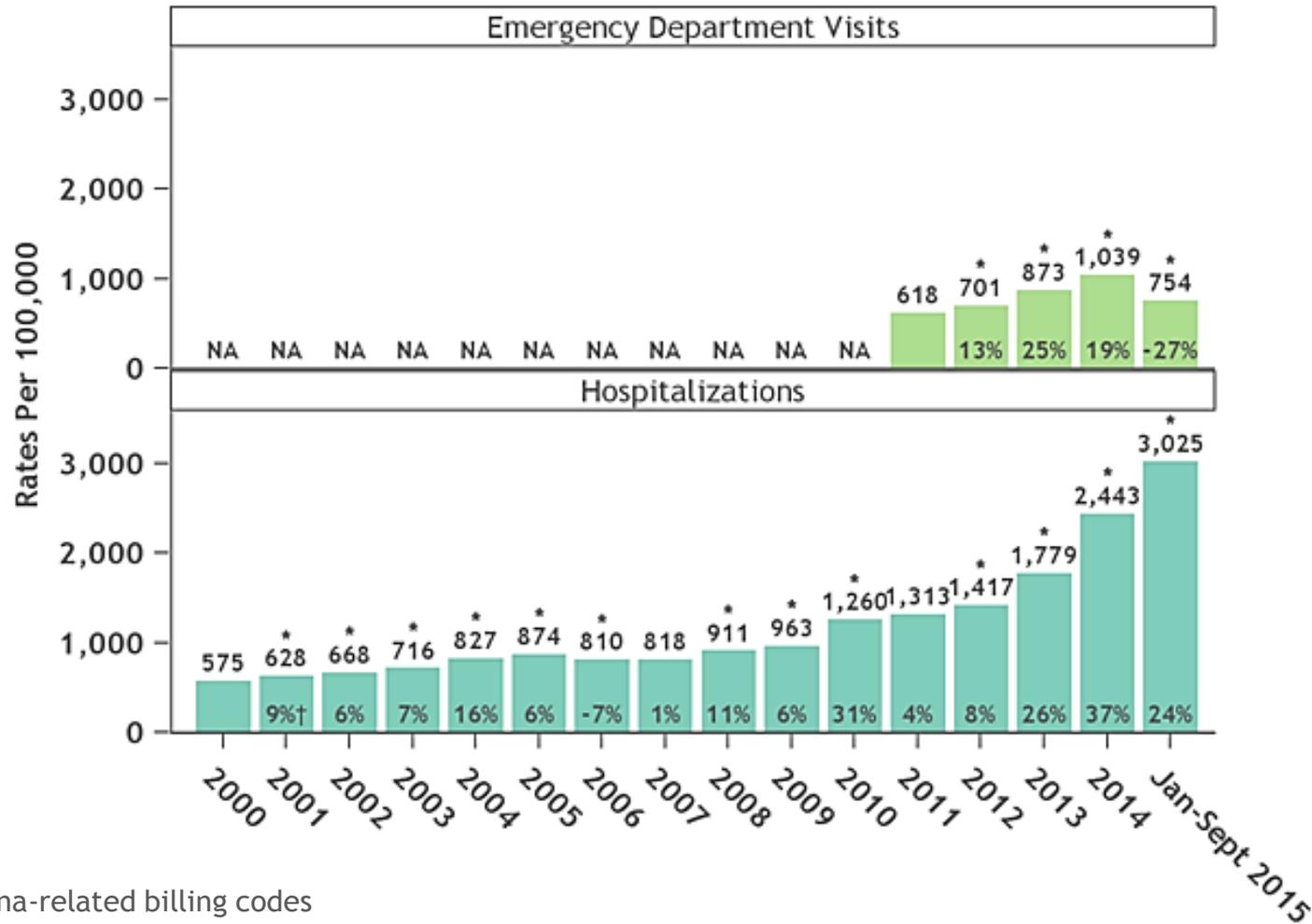
# Calls for intentional and unintentional exposure



# *Number of pediatric marijuana exposure calls to poison control, Colorado*

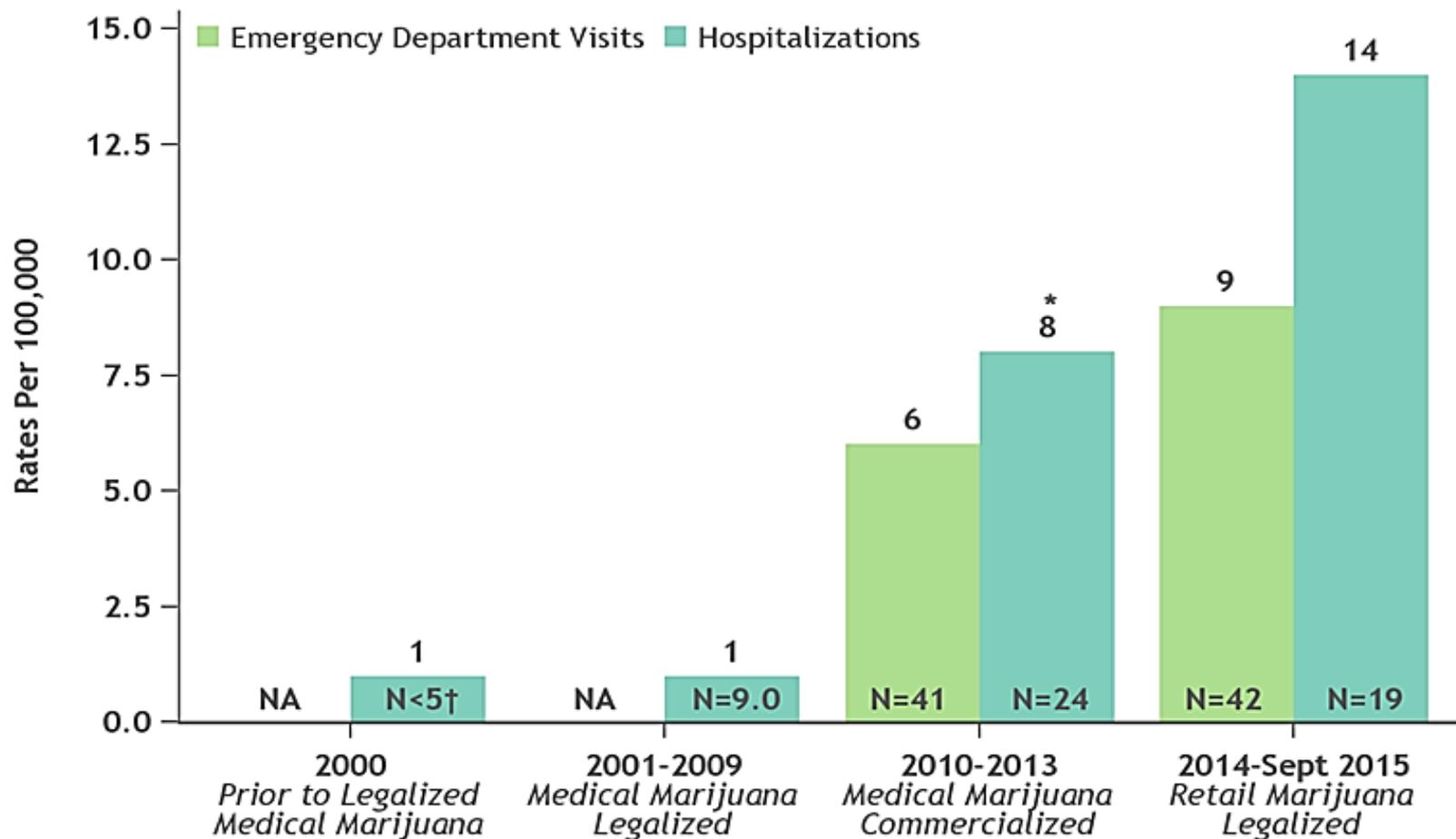


# Colorado marijuana-related emergency visits and hospitalizations\*

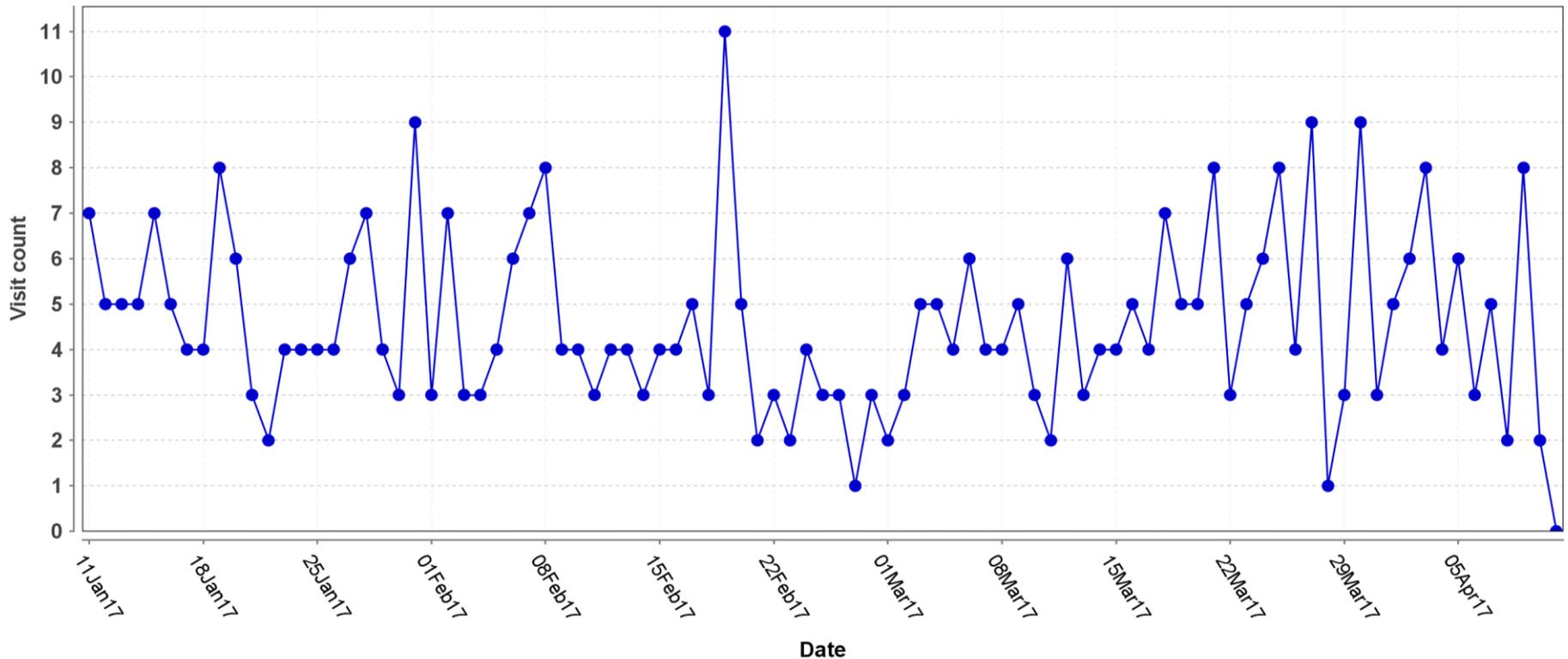


\*with marijuana-related billing codes

# Marijuana-related emergency visits and hospitalizations in children 0-8 years



# Number of Potentially Marijuana-Related Visits, January - April 2017 Tri-County Health Department Jurisdiction, Colorado



# *Data from current MJ users*

## Cannabis Users Survey on Health (CUSH)

- Colorado specific survey
- Convenience sample of marijuana users throughout Colorado
- Detailed questions on frequency and quantity of use, methods of use, reasons for using, adverse effects experienced, and co-substance use

# *Surveillance not occupational focused*

<b>Data Source</b>	<b>Limitations</b>
Surveys on MJ use	Only patterns of use, not about adverse effects.
ED visit and hospitalization data	Coding not validated; no standards between states. No specific coding for occupational exposure.
Poison Center calls	No specific coding for occupational exposure.
Syndromic surveillance	No ICD 10 coding for occupational exposure (requires chart review).

# *Fill gaps in occupational exposure and injury surveillance*

Potential Data Source	Challenges
<ul style="list-style-type: none"><li>• Governmental licensing entities for MJ retailers</li><li>• Bureau of Labor Statistics (Surveillance of injury and illness)</li><li>• Worker's compensation claims</li></ul>	<ul style="list-style-type: none"><li>• Distinguish between exposure/injury among MJ industry workers Vs. MJ use among other workers (i.e., being high on the job)</li><li>• Distinguish growing related exposure (e.g., pesticides) Vs. extraction (e.g., burns)</li><li>• No defined NAICS* code for MJ industry. Absence of uniform MJ-related occupational health indicators.</li><li>• Are their injury claims from MJ industry workers</li></ul>

\* North American Industry Classification System

# Thank you!

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