

# Pasadena Citizens' Advisory Council



## **23rd Annual Worker Safety Report** *promoting continuous improvement* **2000-2024**

*Presentation FINAL – as presented on 3-27-25*

**Presented by Jesus Davila**  
*Safety Specialist and VPP Coordinator*  
Intercontinental Terminals Company

# The report is about **PCAC** plants

- ❑ Data from calendar year 2024
- ❑ Refineries that refine crude oil into gasoline and other fuels
- ❑ Chemical plants that make basic chemicals, organic chemicals, and plastics
- ❑ A plant that treats wastewater for industry and others.
- ❑ Terminals that store liquids until shipment

# Safety Report is about *People* Even Though We Talk about Numbers

---

## □ ***Workers***

- Employees *and* contractors
- In 18 PCAC plants

## □ ***Workplace injuries and illnesses***

- As defined by OSHA

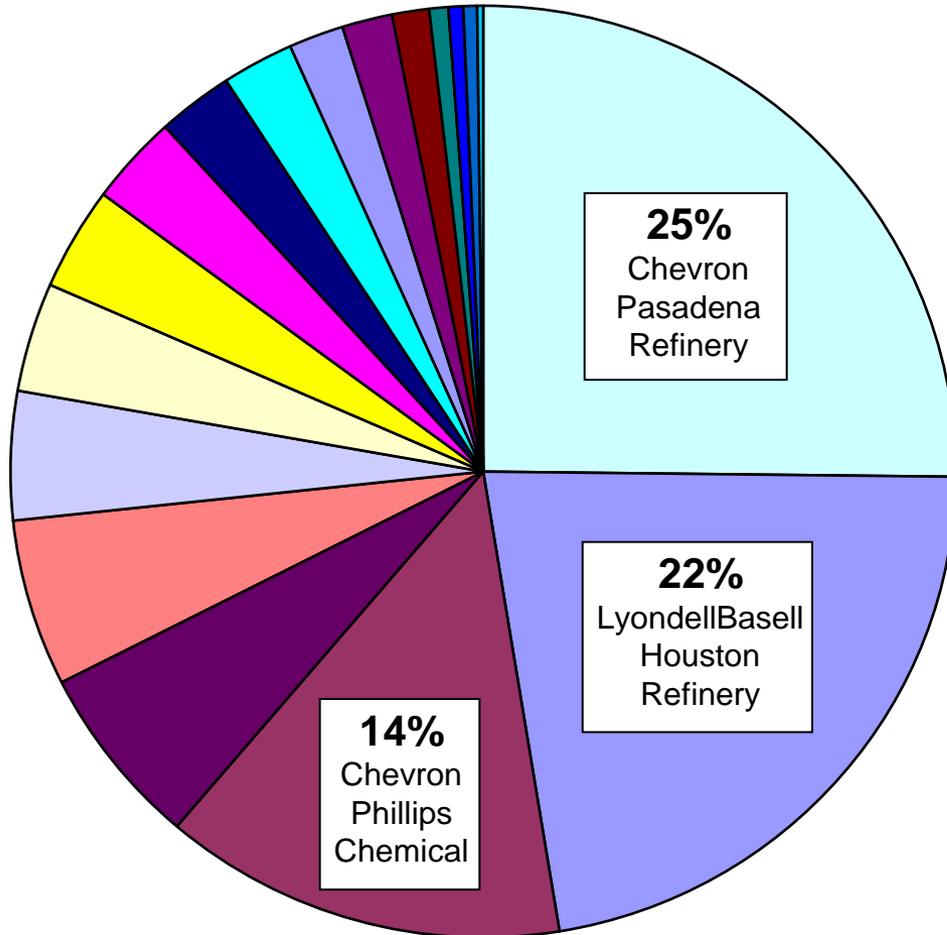
## □ ***Recordable Rate***

- *How many workers per 100* had a work-related injury or illness that required a doctor's intervention – in a year
- 0.00 = best

# Plant Size by Work Hours in 2024

11,282,448 Total Work Hours

61% of total hours worked in 3 plants with more than 1 million work hours each



- Chevron Pasadena Refinery 2,840,460
- LyondellBasell Houston Refinery 2,509,540
- Chevron Phillips Chemical 1,557,276
- KM Pasadena Terminal 711,925
- Ketjen (was Albemarle) 653,102
- OxyChem Pasadena PVC 503,517
- Next Wave Energy Partners 426,717
- Intercontinental Terminals 403,874
- BASF 350,902
- Afton Chemical 292,703
- INEOS Phenol 277,442
- Air Products 212,115
- Sekisui 193,733
- Evonik 143,035
- Gulf Coast Authority 73,215
- KM Export Terminal 56,965
- Enterprise Products\* 53,060
- Ethyl 22,867

# In 2024

---

- **11,282,448** work hours
  - ~ 2,435 employees
  - ~ 2,989 contractors
- **16** workplace injuries or illnesses
- **3,601,557 fewer** work hours than in 2023
- **2 fewer** injuries than in 2023

# Zeroes are Heroes!

## 9 Superheroes with no employee or contractor recordables in **2024**



*\*No contractors*

1. Afton
2. Enterprise Products\*
3. Ethyl
4. Evonik
5. Gulf Coast Authority
6. INEOS Phenol
7. Ketjen (was Albemarle)
8. Kinder Morgan Export Terminal
9. Next Wave Energy Partners

# Zeroes are Heroes!

## 13 heroes with no employee recordables in 2024

Companies in bold had *contractor* recordables

1. Afton
2. **Air Products**
3. **BASF**
4. **Chevron Phillips**
5. Enterprise Products\*
6. Ethyl
7. Evonik
8. Gulf Coast Authority
9. INEOS
10. Ketjen (was Albemarle)
11. Kinder Morgan Export Terminal
12. **LyondellBasell**
13. Next Wave Energy Partners



\*No contractors

# Zeroes are Heroes!

## 12 heroes with no contractor recordables in 2024

In 2024, Enterprise Products had no contractors.  
Companies in bold had *employee* recordables

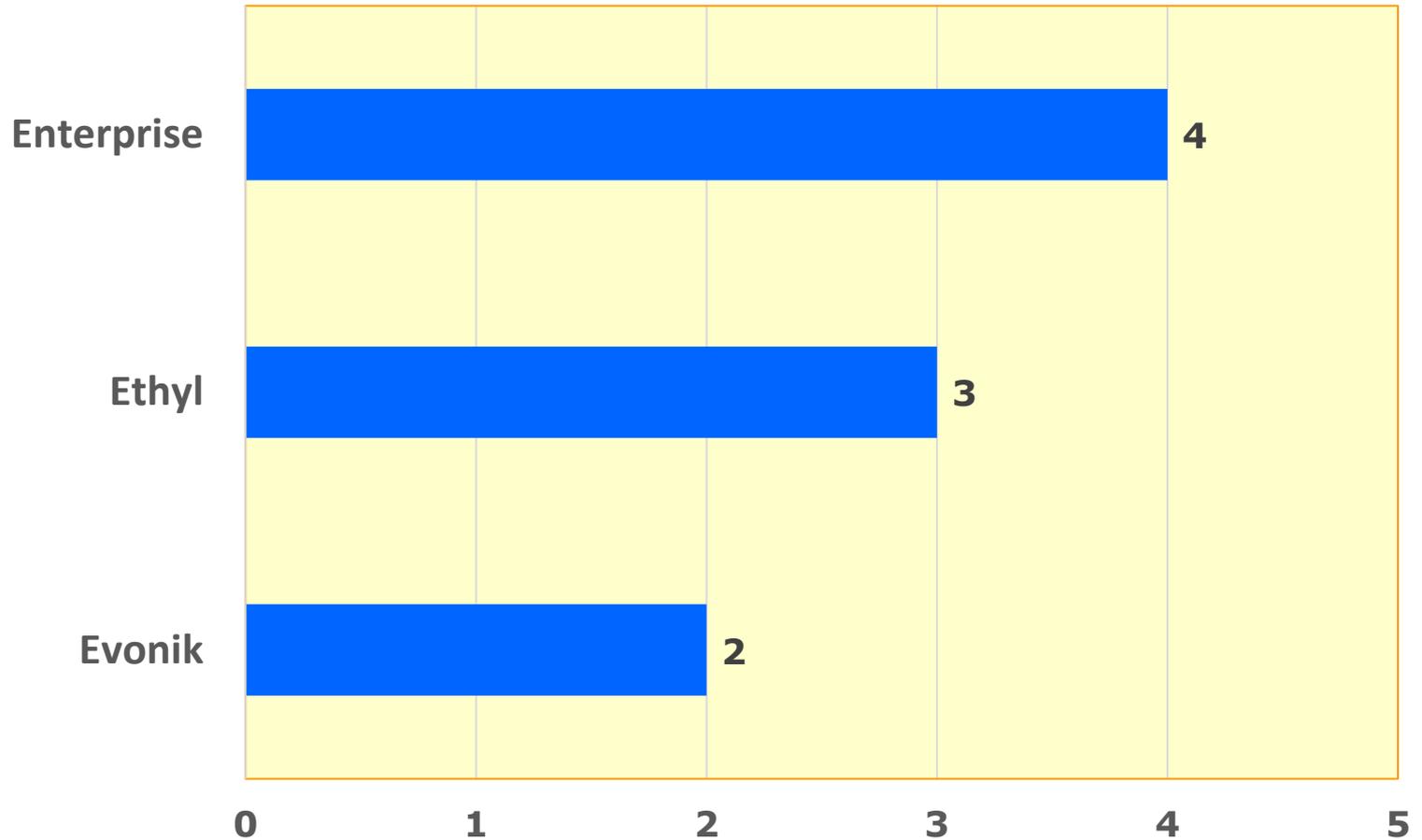
1. Afton
2. Enterprise Products\*
3. Ethyl
4. Evonik
5. Gulf Coast Authority
6. INEOS Phenol
7. **Intercontinental Terminals Co.**
8. Ketjen (was Albemarle)
9. Kinder Morgan Export Terminal
10. Next Wave Energy Partners
11. **OxyChem**
12. **Sekisui**

\*No contractors

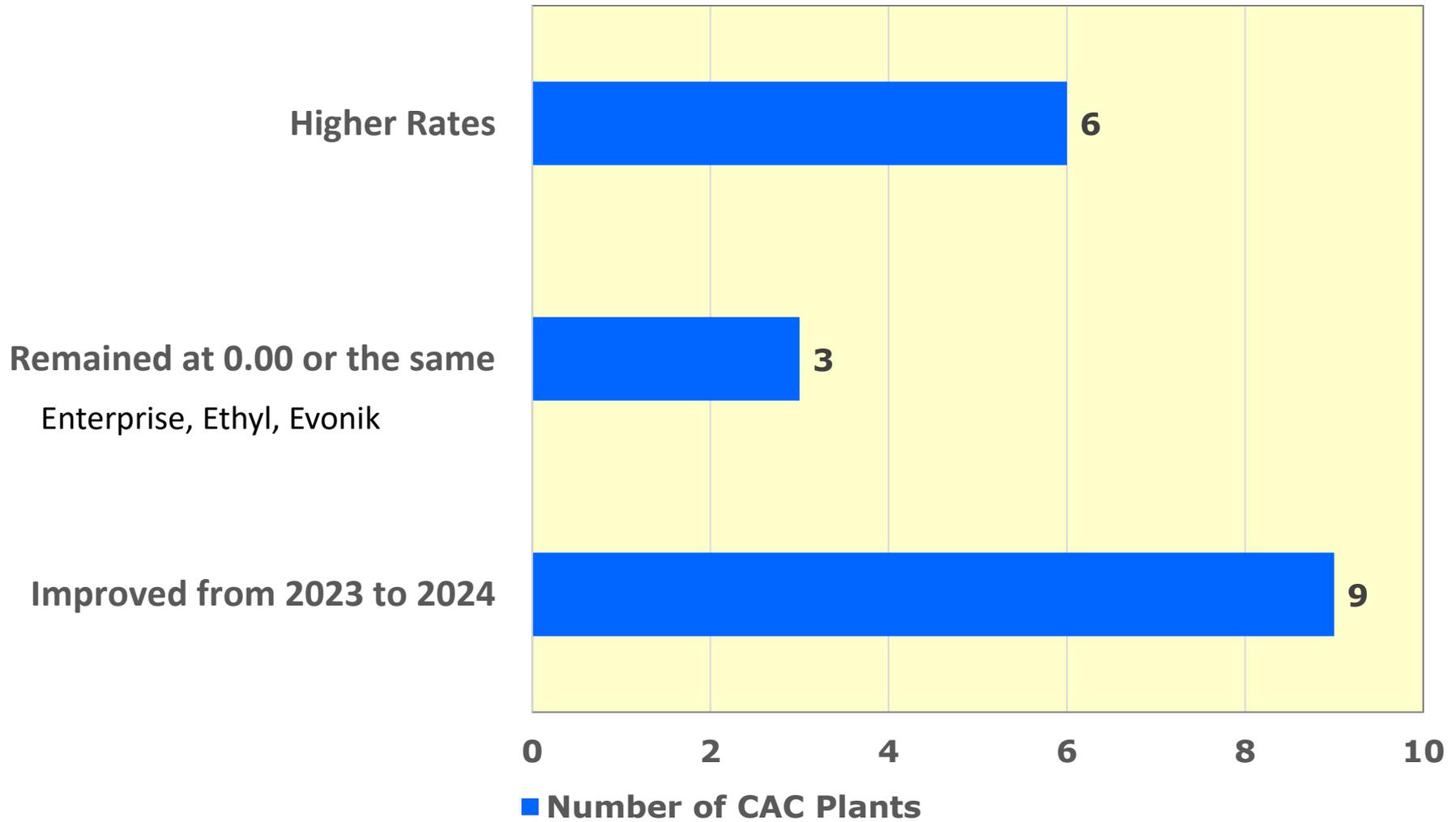


# Zeroes are Heroes!

Years in a row that CAC plant had a 0.00 Recordable Rate



# Comparison to Prior Year



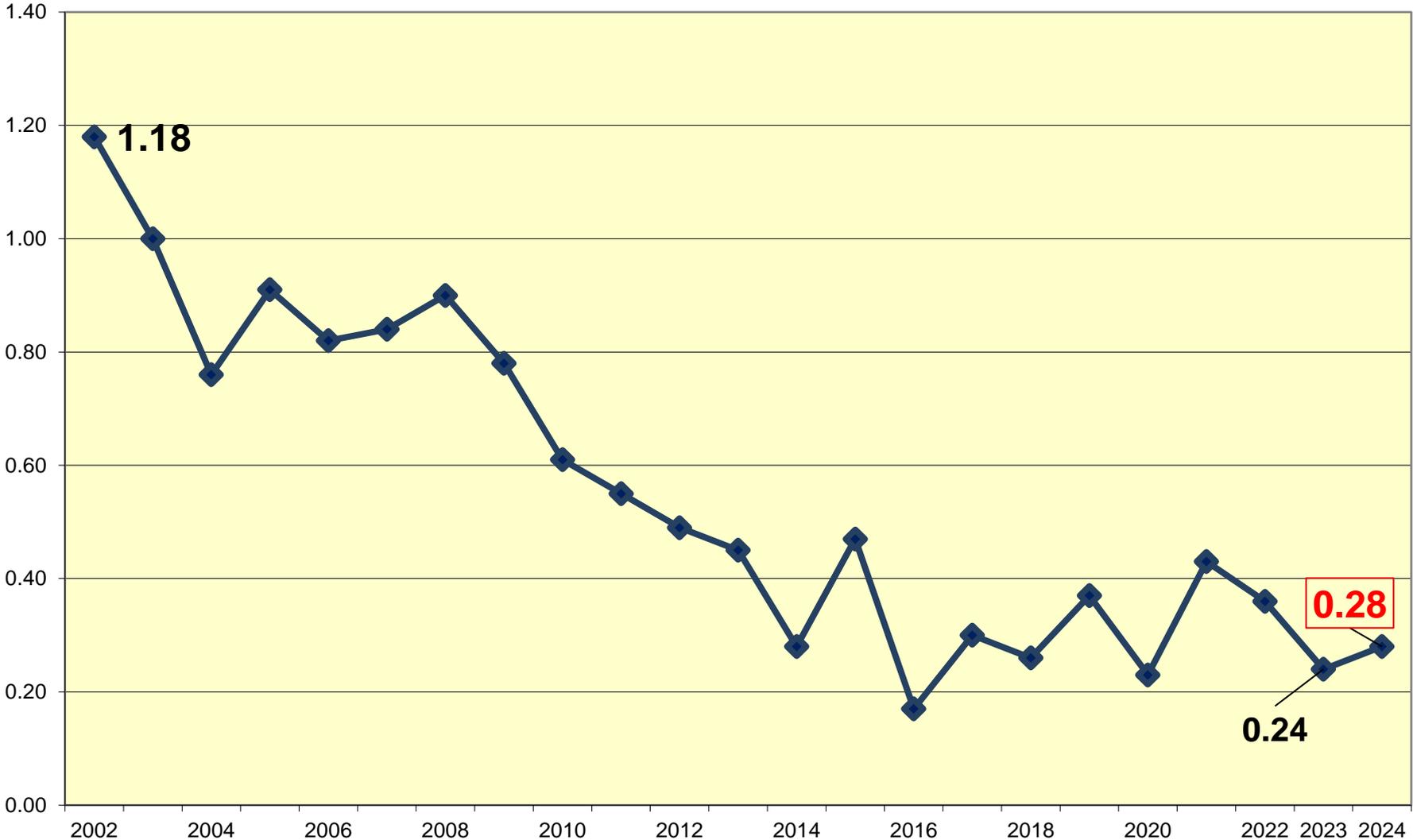
# OSHA Voluntary Protection Program (VPP)

- 2 VPP plants:
  - OxyChem Pasadena PVC (1991)
  - Chevron Phillips Chemical (2015)
- Intercontinental Terminals working toward VPP and Challenge (since 2017)

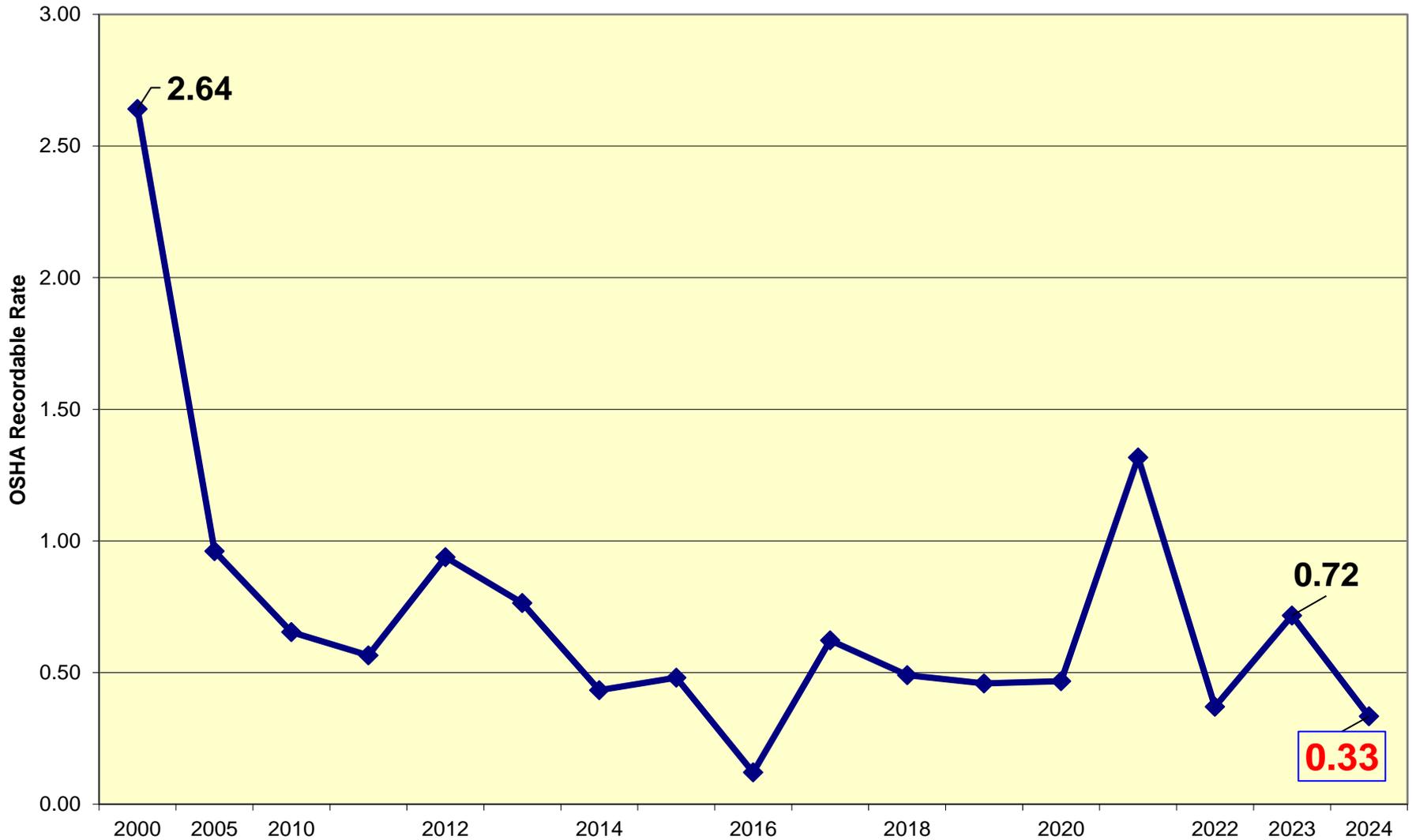
# STATISTICS

averages, median, range

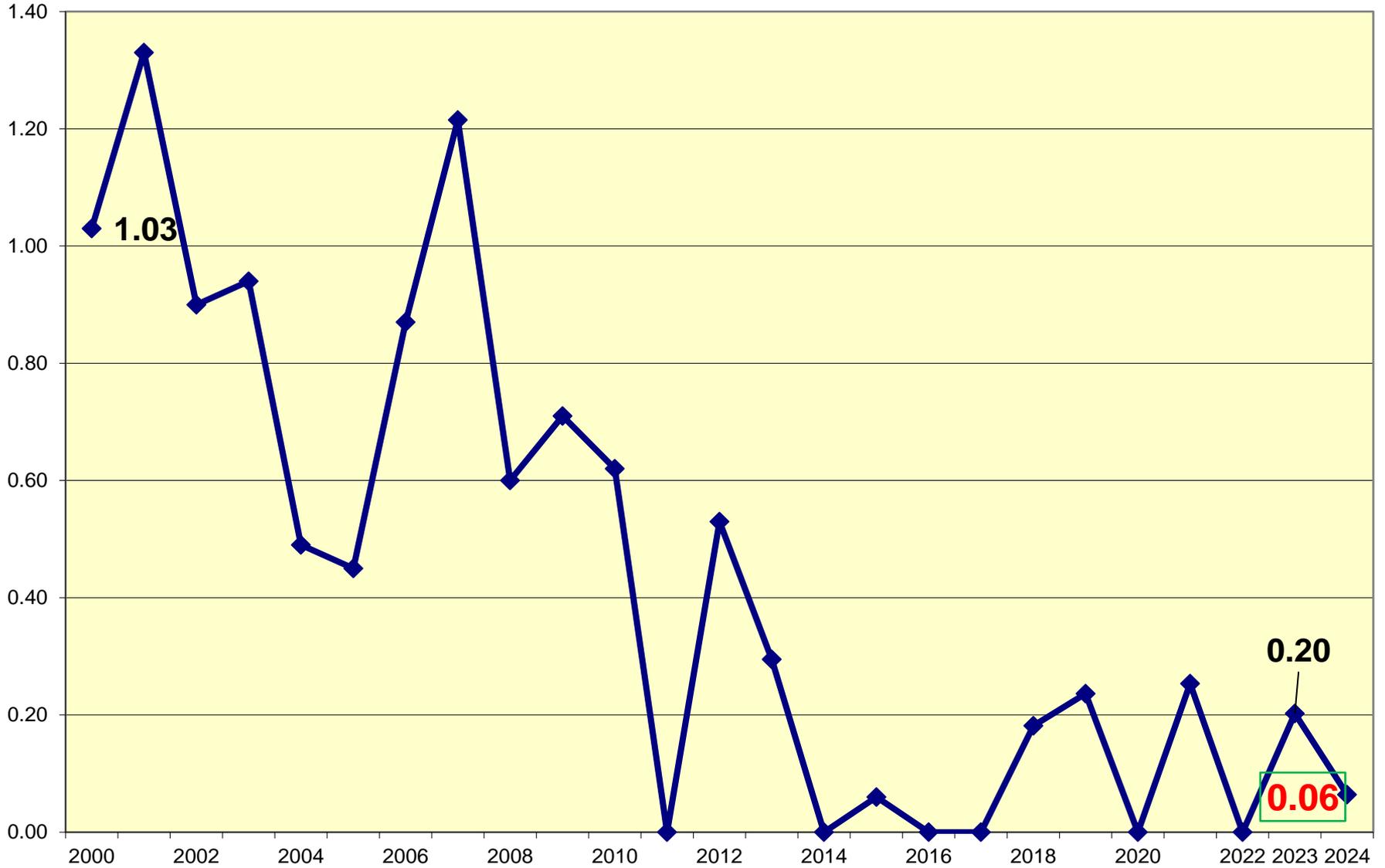
# Trend in Weighted Averages 2024



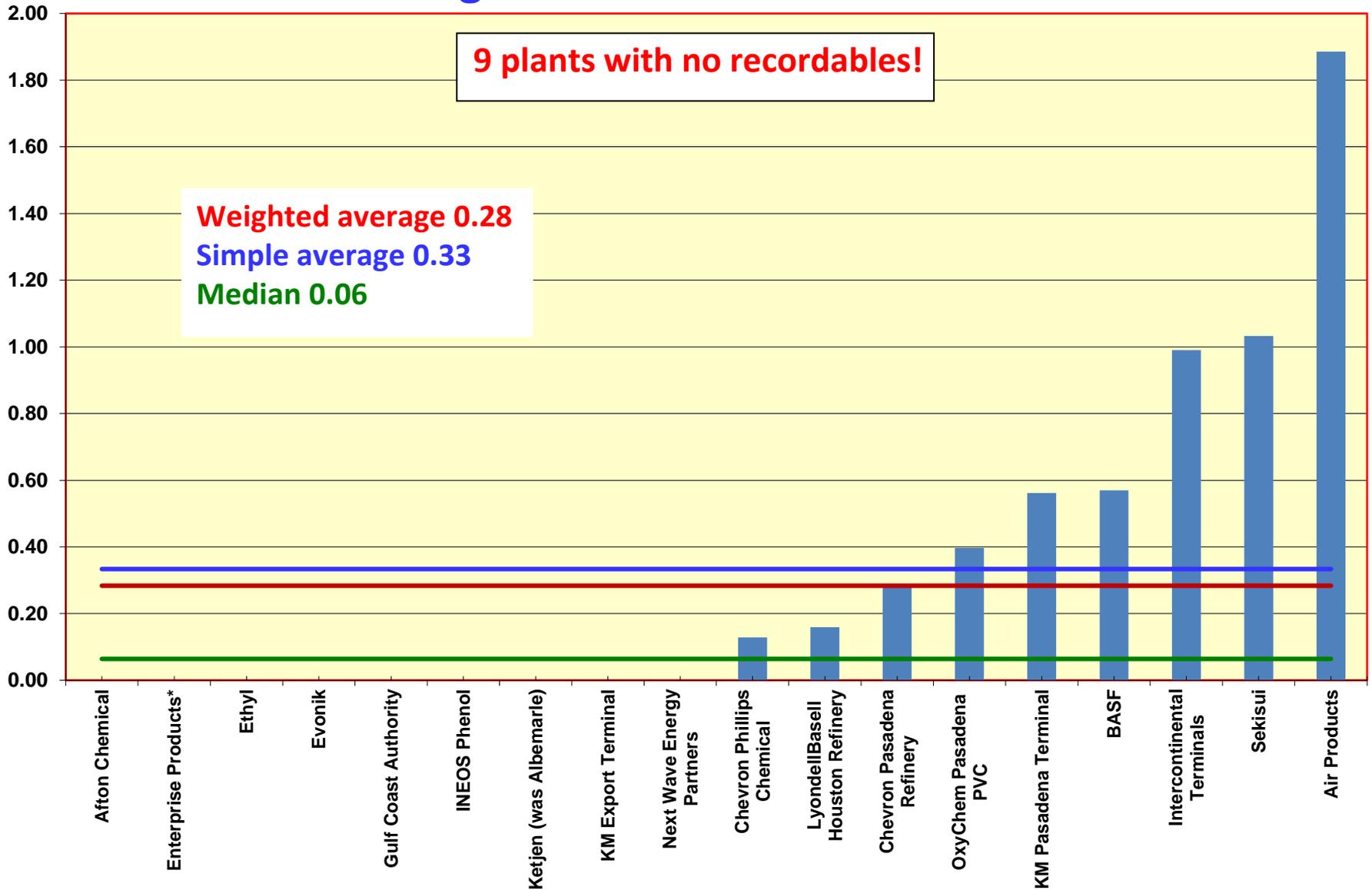
# Trend in Simple Average 2024



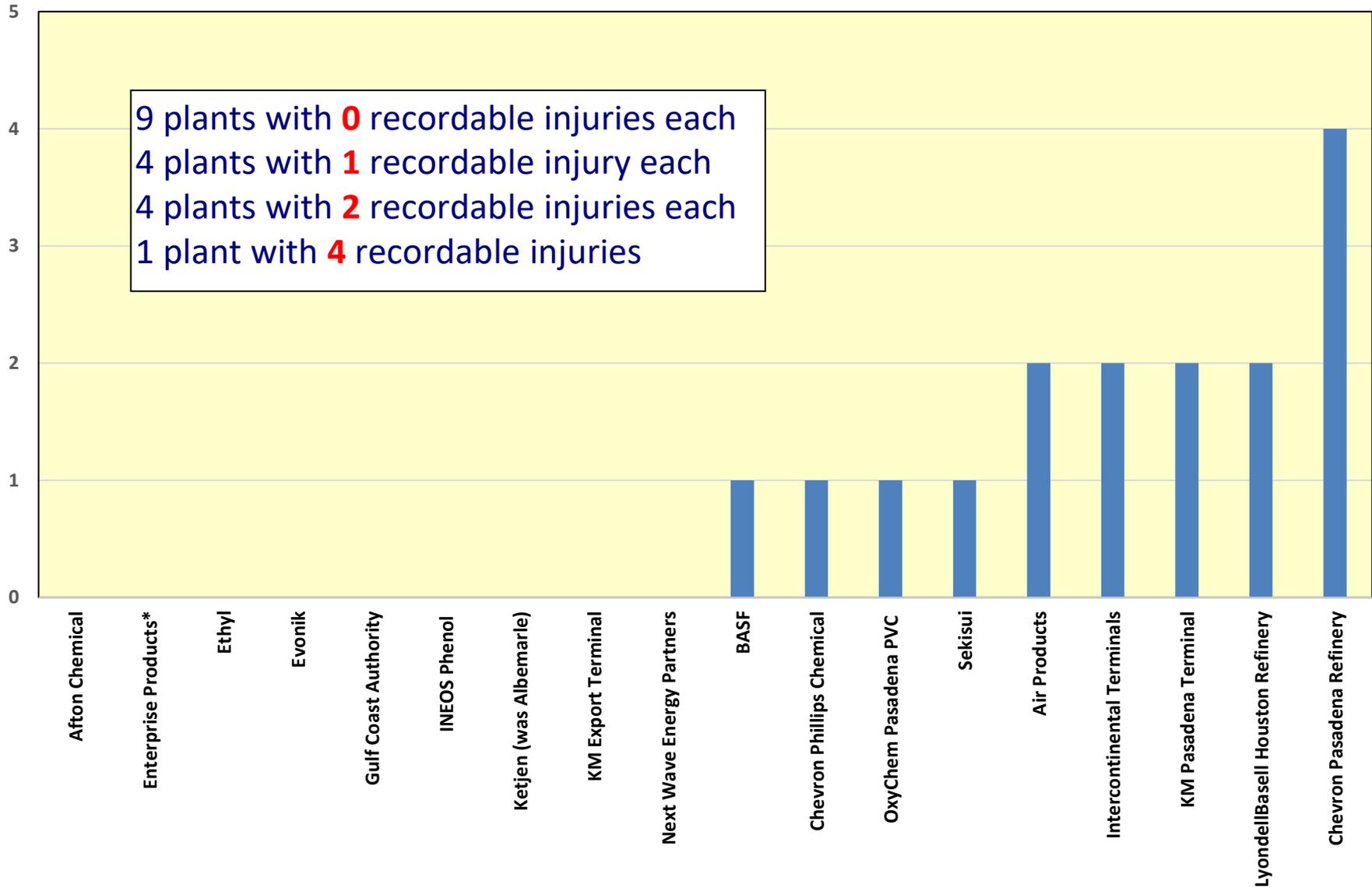
# Trend in Median 2000-2024



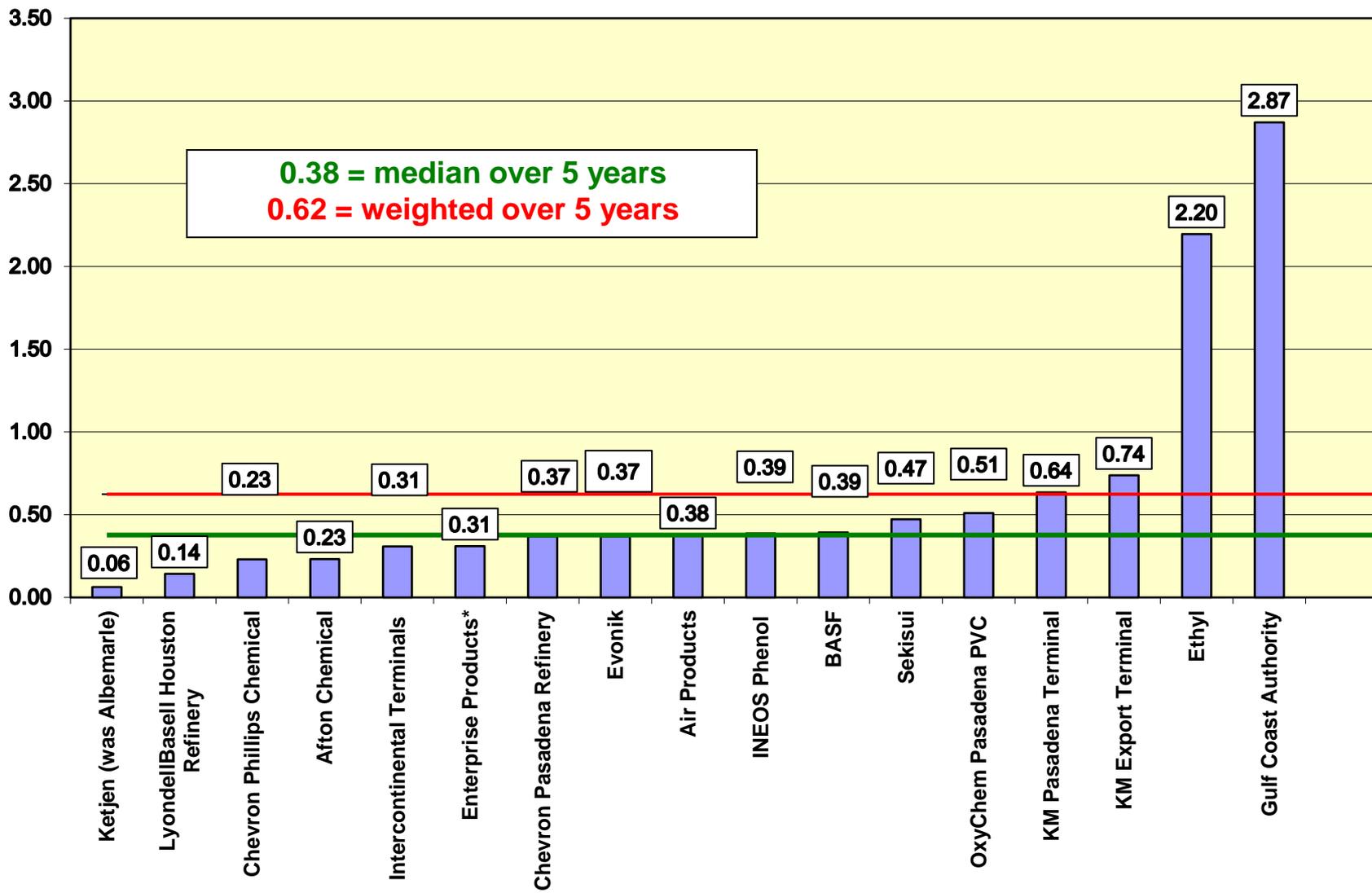
# Plant Rankings 2024 Based on Recordable Rates



## Plant Rankings by *Number* of Recordables - 2024



## 5-Year Plant Ranking by Average Recordable *Rates* 2020-2024 for plants in PCAC for 5 or more years



# SEVERITY

fatalities, lost-time, restricted duty,  
others

# Severity varies

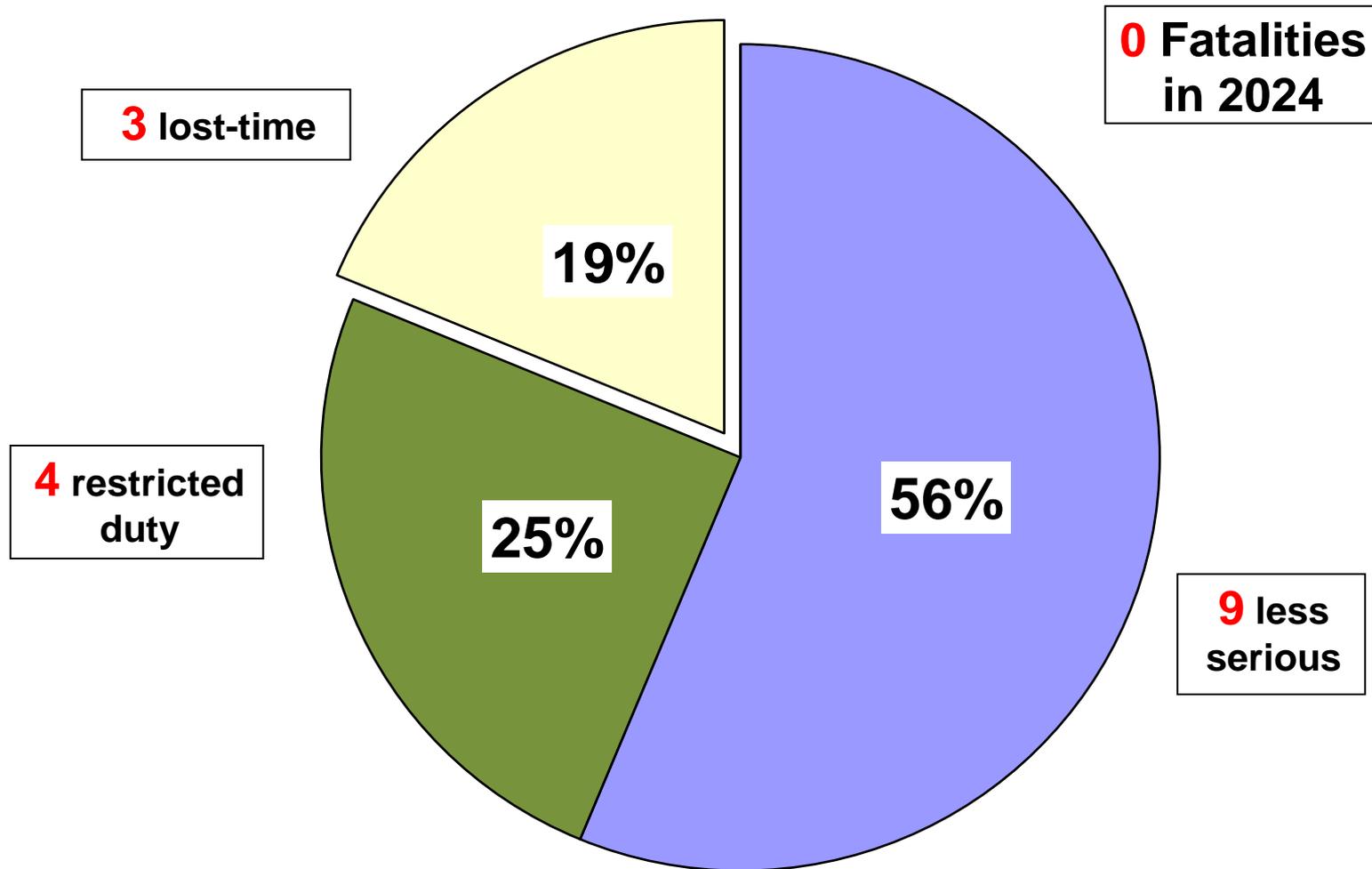
- **0 fatalities in PCAC plants in 2023**
- **Lost time** (unable to come to work)
  - ❖ Such as a scraped abdomen caused in a fall
  - ❖ Such as a fractured ankle
- **Restricted duty** (at work but unable to do usual job)
  - ❖ Such as a dislocated toe
  - ❖ Such as a cut thumb
- **Others** (also required doctor's intervention)
  - ❖ Such as bruised ribs caused when a worker slipped
  - ❖ Such as 8 stitches for a leg laceration

*2 fewer restricted duty case than in 2023 – 4 vs 6*

*Same number of lost-time cases as in 2023 – 3*

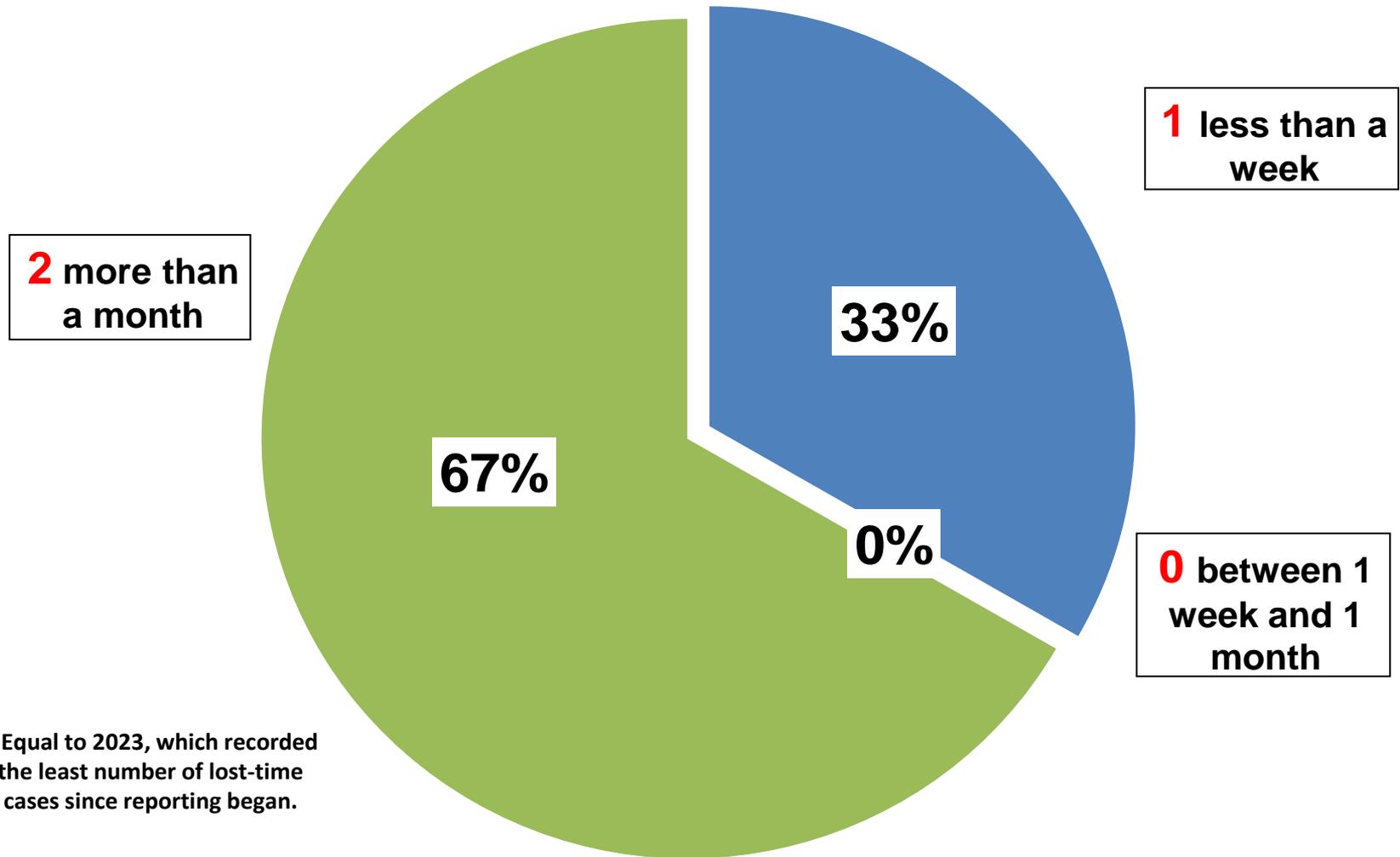
*44% (7 of 16 total) were either lost time or restricted duty, down from 50% in 2023*

## Severity of Injury or Illness in 2024



# Severity of the 3 Lost-Time Cases in 2024\*

based on number of days away from work



# INJURY CAUSES AND TYPES

most common, causes, types

# Most common recordables in 2024

## **Slips, Trips, Falls, or Walking into Something Resulted in:**

- ❑ Bruised ribs
- ❑ Dislocated toe
- ❑ Fractured ankle
- ❑ Scraped abdomen

## **Falling Objects or Being Struck by Something:**

- ❑ Tear in a knee ligament
- ❑ Stitches on pinky finger

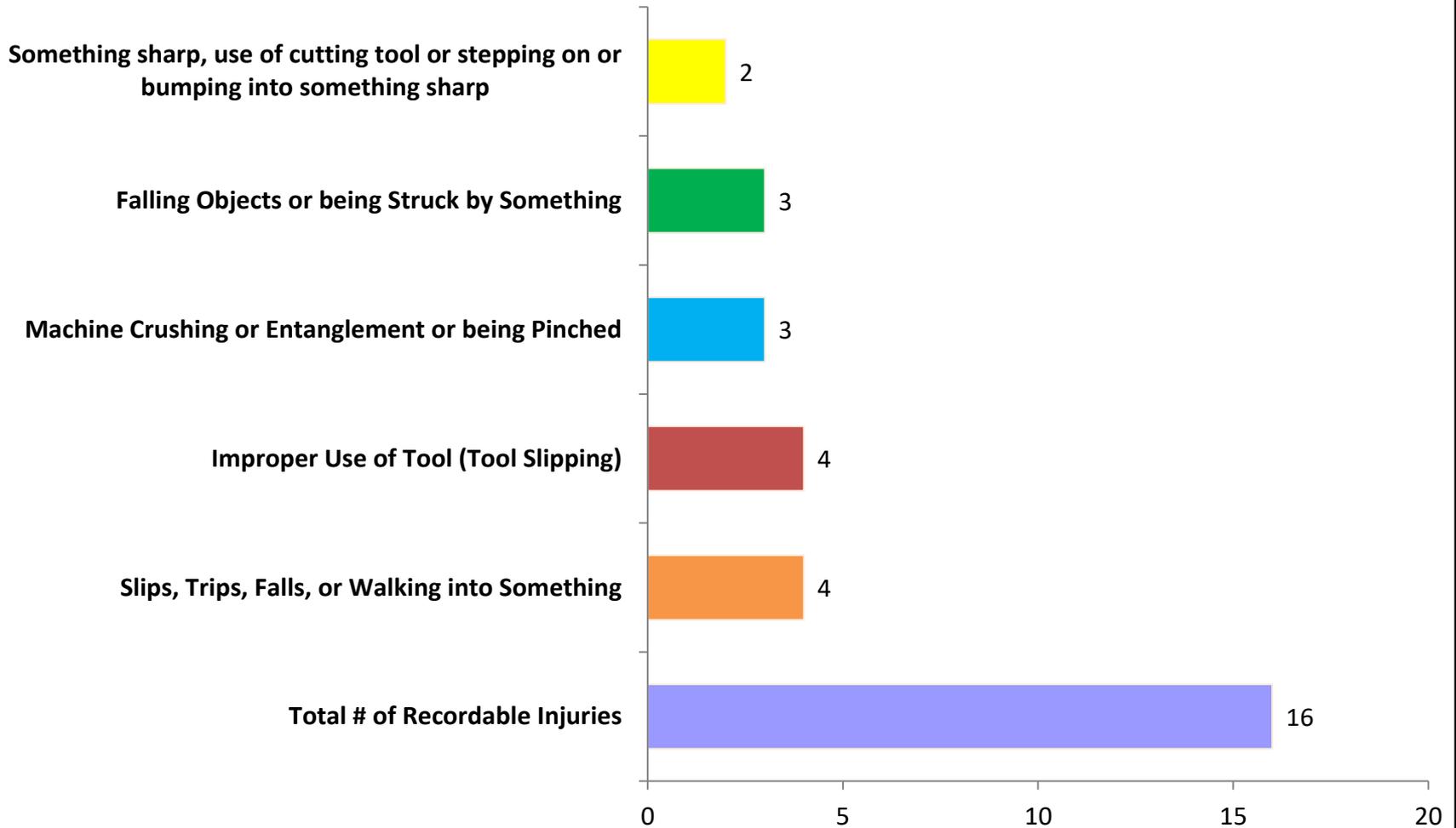
## **Machine Crushing or Entanglement or Being Pinched:**

- ❑ Hand laceration
- ❑ Thumb fracture

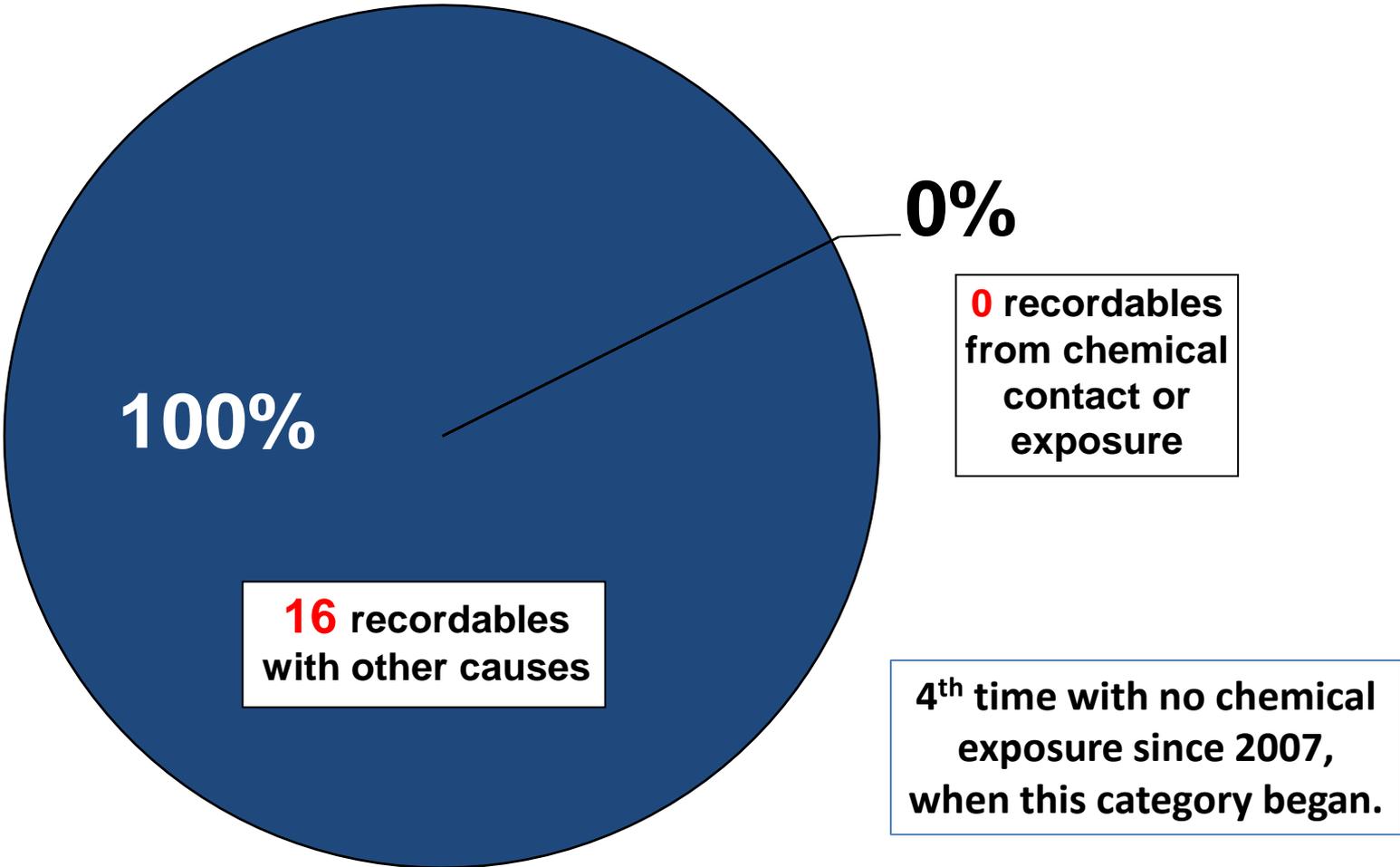
# Causes of the 16 Recordables in 2024

- **0** were caused by a process safety incident. (Process safety incidents typically are fire, explosion, or major toxic release.)
- **0** were caused by mechanical/equipment failure or inadequate design

## Recordable Injuries in 2024 Resulted From:



# Recordables from Chemical Contact or Exposure in 2024



# COMPARISONS

Comparing:

- ❖ PCAC employees to PCAC contractors
- ❖ PCAC to similar manufacturing, chemical manufacturing, other kinds of workplaces
- ❖ PCAC to other CACs

# Employees -- 2024 -- Contractors

5.1 million work hours

13 of 18 plants with 0.00s

0.32 weighted avg.

0.00 median (middle)

2.35 highest rate (2 injuries)

6.2 million work hours

12 of 17 plants with 0.00s\*

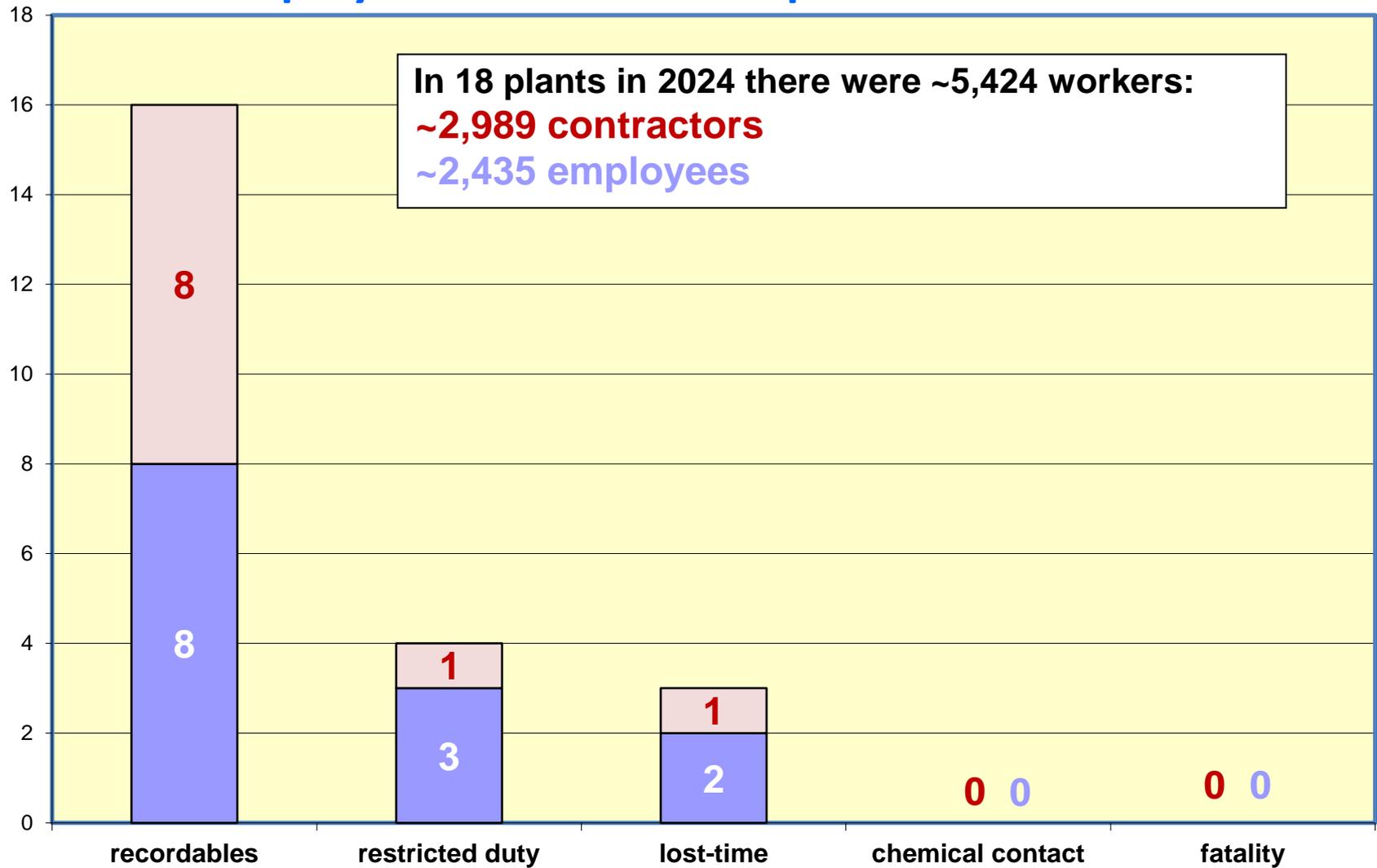
0.26 weighted avg.

0.00 median (middle)

2.02 highest rate (2 injuries)

\*Enterprise did not have contractor hours

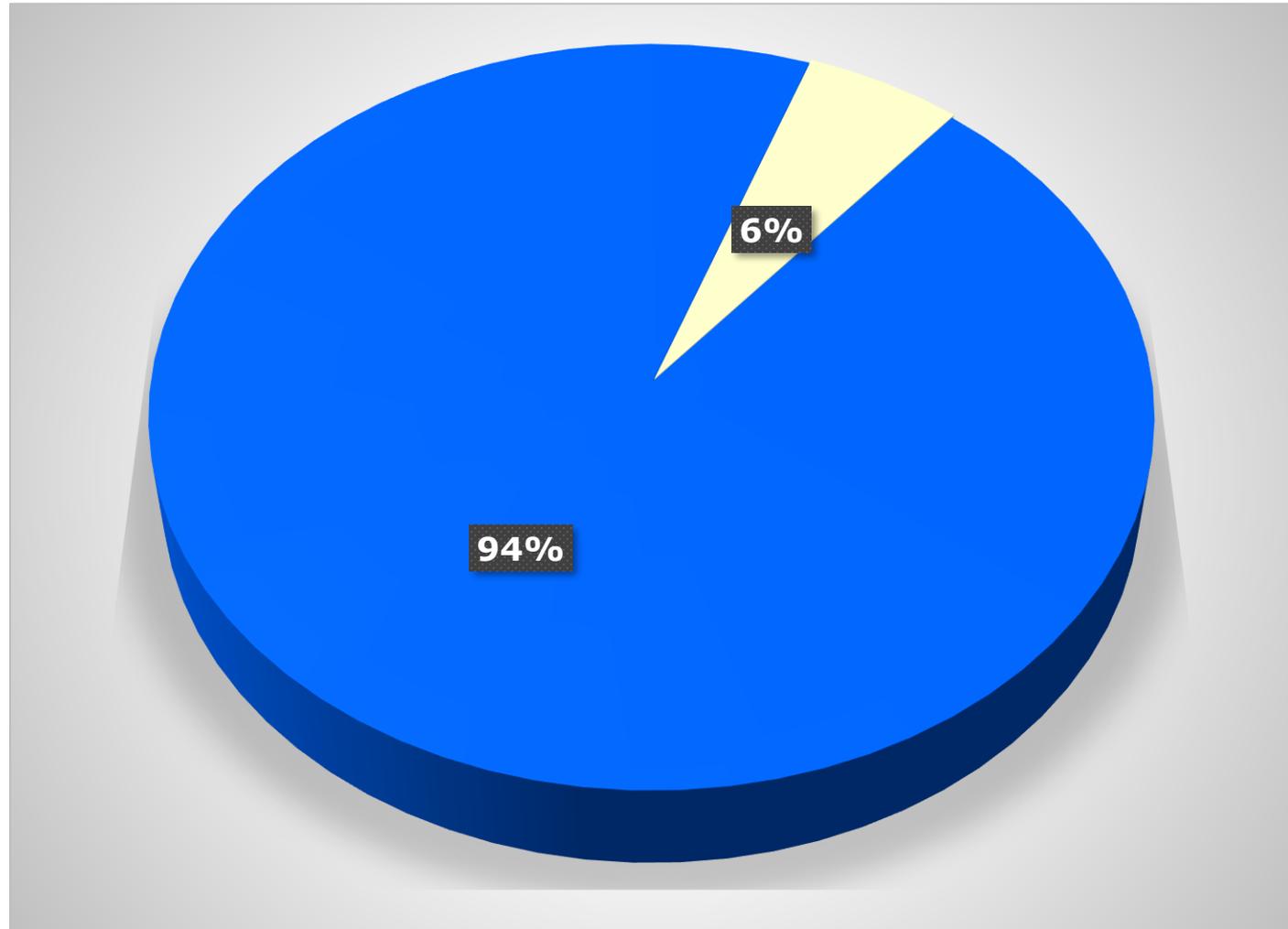
# Employee-Contractor Comparisons in 2024



# National Industry Comparisons

In 2024, **17 of 18** PCAC plants had recordable rates better than 2023 rates of companies nationwide in their NAICS code.

*(In 2023, 16 plants did better.)*



## Comparing Recordable Rates within OSHA's Nationwide Industry Groups

2023 NATIONAL DATA	NAICS CODE	INDUSTRY GROUP	2024 Total Plant Recordable Rate	2023 Total Plant Recordable Rate	2023 NAICS group rate
Gulf Coast Authority	2213	Water, Sewage, and Other Systems	0.00	<b>5.46</b>	4.50
Chevron Pasadena Refinery	324110	Petroleum Refineries	0.28	0.39	0.50
LyondellBasell Houston Refinery	324110	Petroleum Refineries	0.16	0.14	
Next Wave Energy Partners	325110	Basic Chemical Manufacturing	0.00	0.05	1.40
INEOS Phenol	325110	Basic Chemical Manufacturing	0.00	0.84	
Air Products	3251	Industrial Gas Manufacturing	<b>1.89</b>	0.00	1.40
Afton Chemical	325199	All Other Basic Organic Chemical Manufacturing	0.00	0.64	1.40
BASF	325199	All Other Basic Organic Chemical Manufacturing	0.57	0.80	
Ethyl	325199	All Other Basic Organic Chemical Manufacturing	0.00	0.00	
Evonik	325199	All Other Basic Organic Chemical Manufacturing	0.00	0.00	
Ketjen (was Albemarle)	325199	All Other Basic Organic Chemical Manufacturing	0.00	0.31	
Chevron Phillips Chemical	325211	Plastics Material and Resin Manufacturing	0.13	0.31	1.50
OxyChem Pasadena PVC	325211	Plastics Material and Resin Manufacturing	0.40	0.00	
Sekisui	325211	Plastics Material and Resin Manufacturing	1.03	0.00	
Enterprise Products*	4247	Petroleum Products Merchant Wholesalers	0.00	0.00	1.40
Intercontinental Terminals	49319	Other Warehousing and Storage	0.99	0.00	2.90
KM Export Terminal	493190	Other Warehousing and Storage	0.00	<b>3.69</b>	
KM Pasadena Terminal	493190	Other Warehousing and Storage	0.56	0.26	

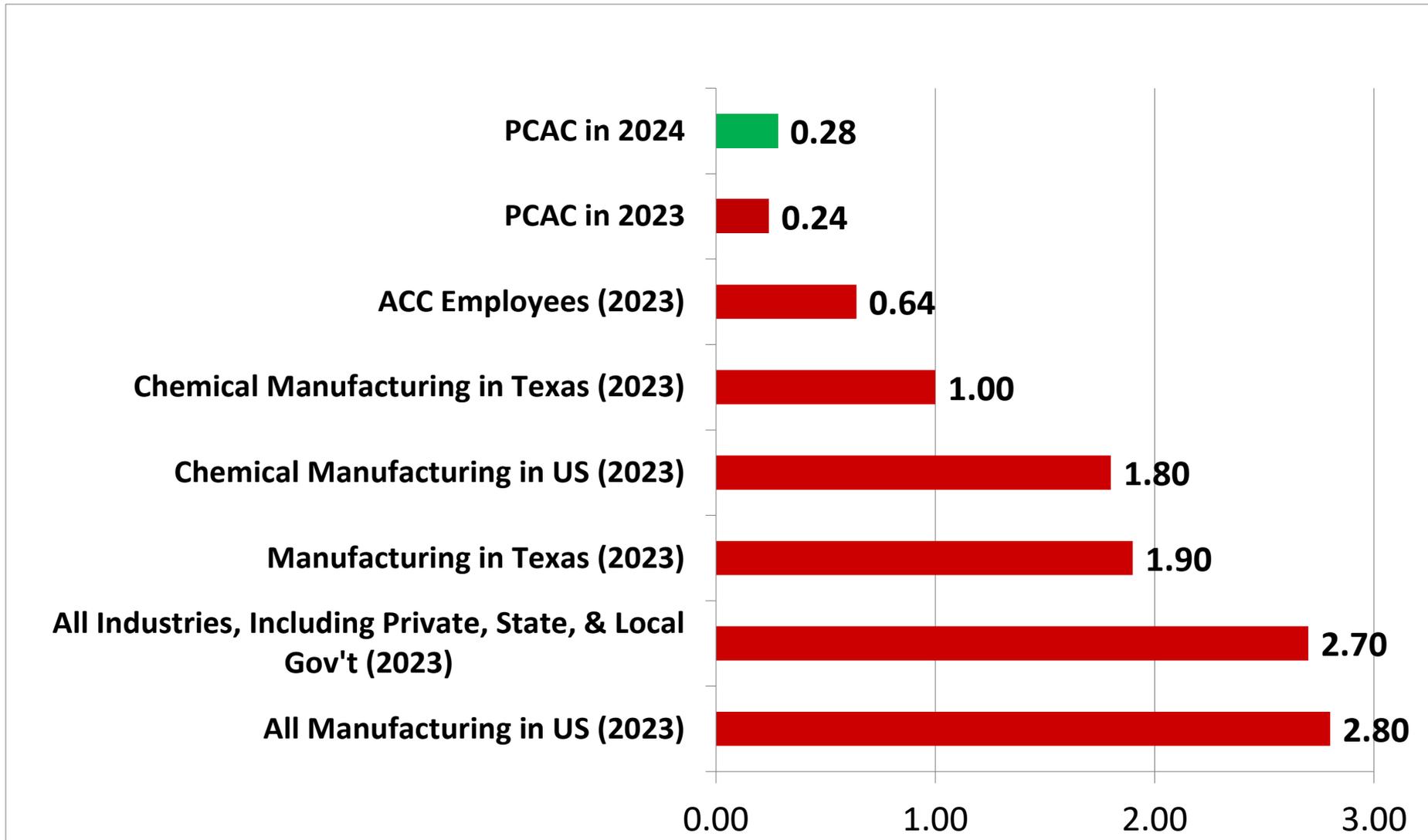
After the passage of North American Free Trade Agreement (NAFTA), the North American Industry Classification System (NAICS) replaced the former Standard Industrial Code (SIC) system as a way to classify 20 major industrial sectors and the businesses within each.

**Based on 2023 OSHA data, all but 2 PCAC plants performed better than those in the same industry code group in 2023 and all but 1 in 2024.**

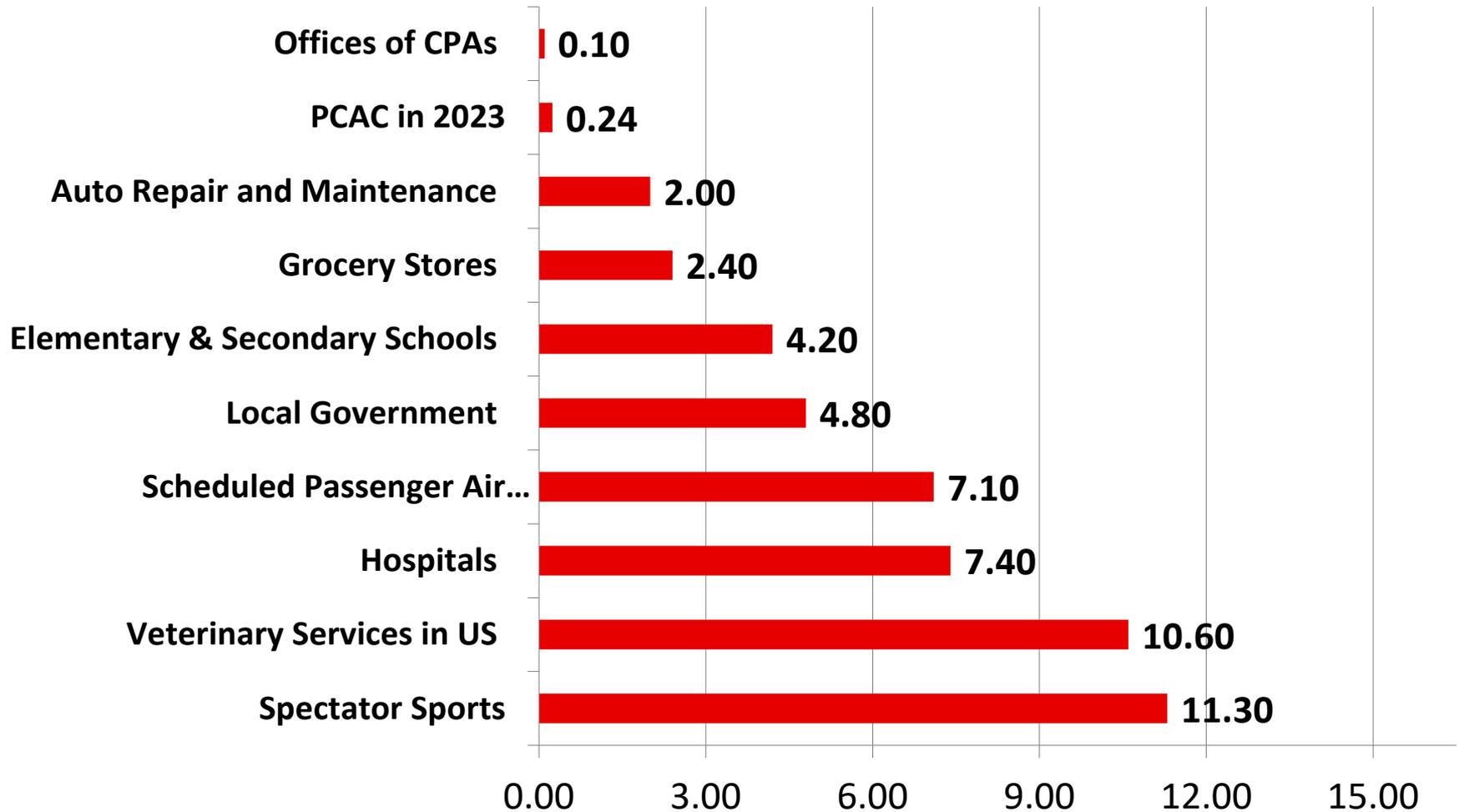
Source of OSHA data is US Bureau of Labor Statistics nonfatal workplace injuries and illnesses found at [www.bls.gov](http://www.bls.gov)

\* no contractor hours

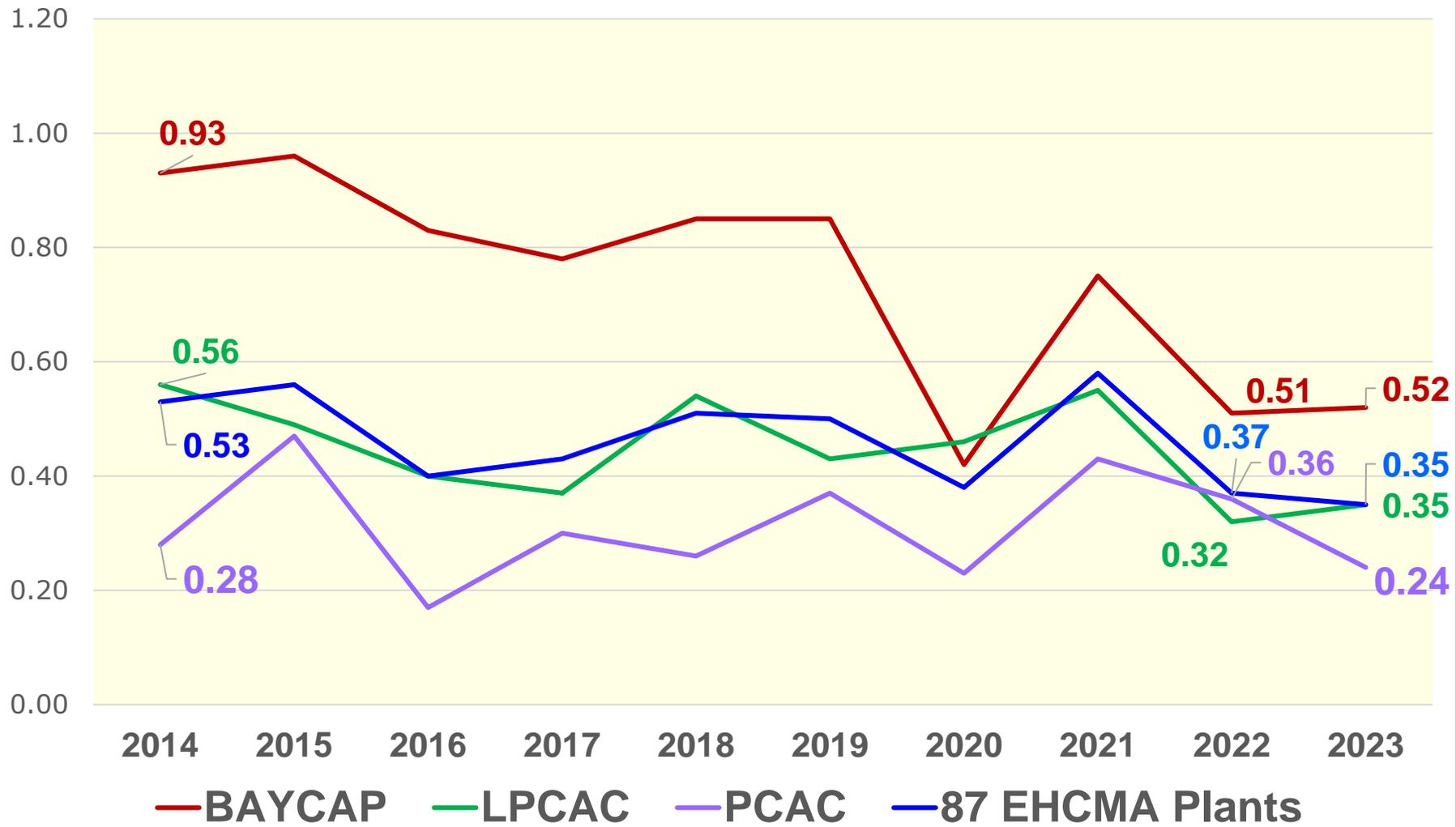
# Comparisons on Manufacturing Recordable Rates



# Comparisons of Weighted Recordable Rates



# CAC Weighted Average Comparison 2014-2023



# Comparisons of employees & contractors

ACC and BAYCAP Data from 2023

PCAC and LPCAC Data from 2024

## Employees

**0.32** PCAC plant *employees*

**0.47** LPCAC plant *employees*

**0.50** BAYCAP plant *employees*

**0.64** American Chemistry Council (ACC) member-company *employees*

## Contractors

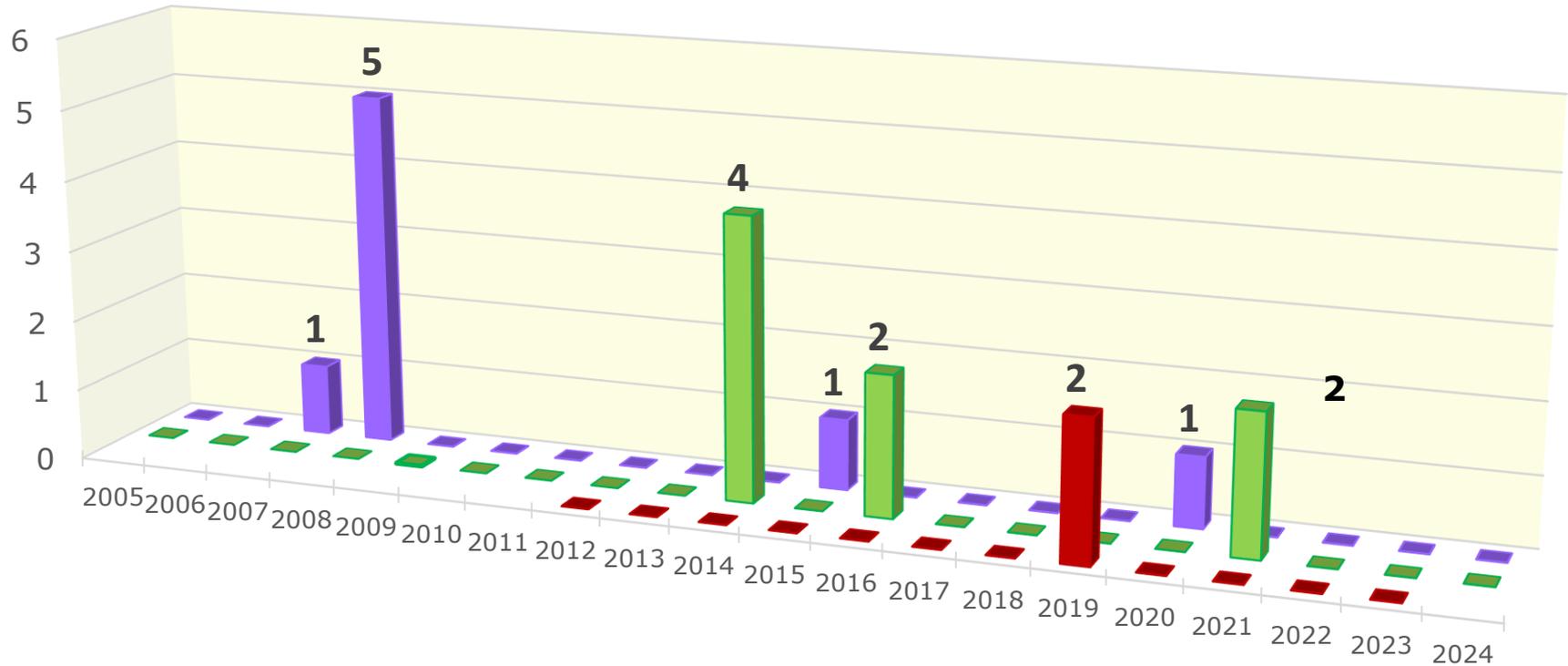
**0.15** LPCAC plant *contractors*

**0.26** PCAC plant *contractors*

**0.305** American Chemistry Council (ACC) member-company *contractors*

**0.56** BAYCAP plant *contractors*

# CAC Fatality Comparison 2005-2024



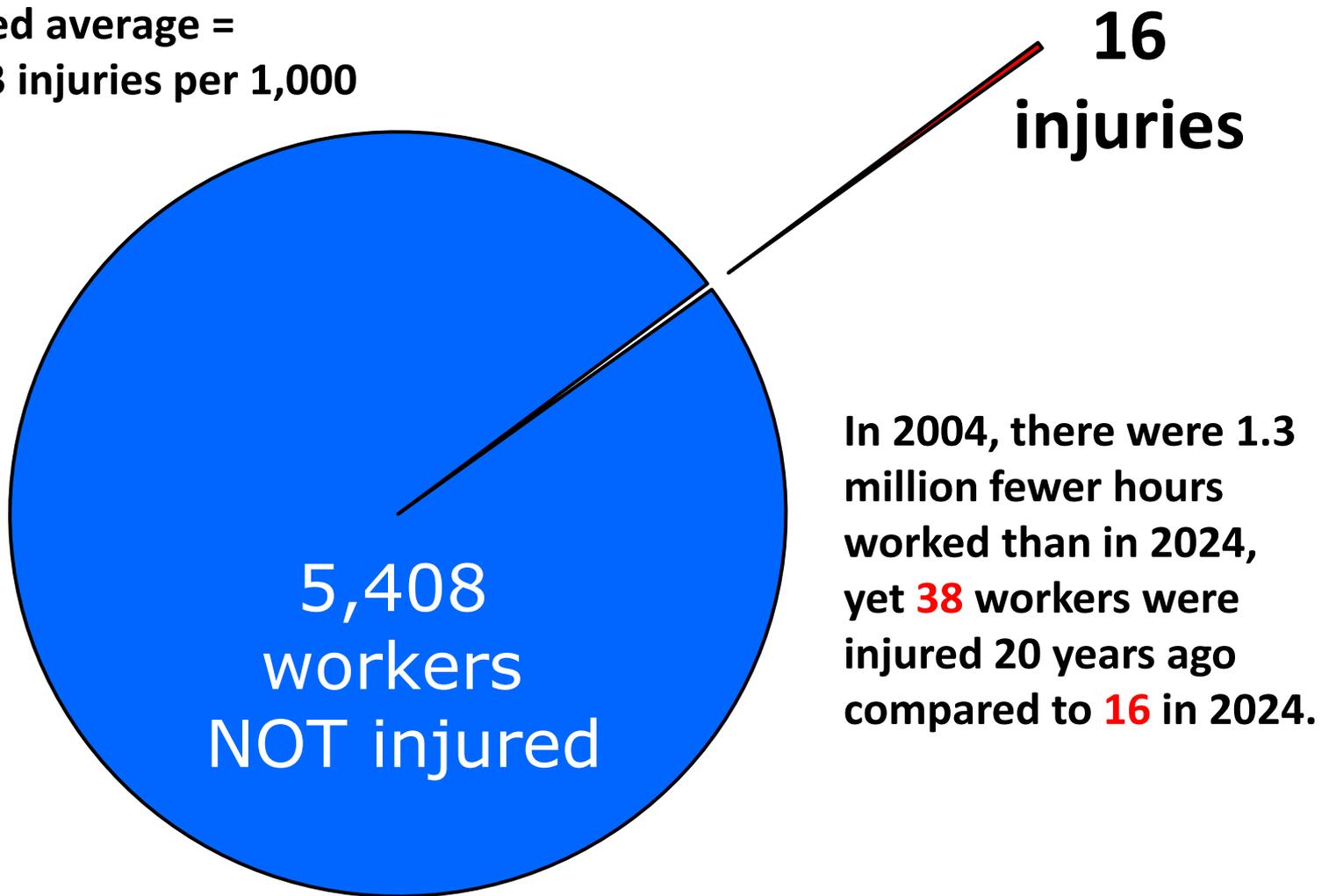
LPCAC and PCAC started asking for fatality data for 2005.

BAYCAP started its safety report in 2012

■ BAYCAP ■ LPCAC ■ PCAC

# Safety Report Is about **People**

0.28 weighted average =  
fewer than 3 injuries per 1,000



# Questions?

- Contact Emily Morris, PCAC Facilitator
- 832-443-3617
- [ekmorrisconsulting@gmail.com](mailto:ekmorrisconsulting@gmail.com)