



# MOSH FOG Day of learning

Good Ledging Practice  
27 October 2015



## Current state of the industry

- Low commodity prices
- Increasing cost of production (labour and electricity)
- Increasing cost of poor health and safety (human suffering and lost production)
- Good health and safety makes good business sense
- It is our moral obligation

The logo for Sibanye Gold, featuring the word "Sibanye" in white and "GOLD" in orange, with a stylized orange and white 'S' icon to the left.

SibanyeGOLD

## Road to Zero Harm

Every mine worker returning from work  
unharmed every day



## The road to zero harm

- Milestones developed collaboratively between all stakeholders (Mine-Safe Summit 2014)
- This collaborative effort strives to ensure a learning and participative culture
- The intent of the milestones is to accelerate our journey to zero harm
- Clear timeframes for delivery
- Implementation of risk-specific activities such as:
  - Adoption of leading practice (MOSH)
  - Implementation of research outcomes (CoE)
- The MHSC's Culture Transformation Framework (CTF) is a pivotal driver in accelerating our journey to zero harm
- CEO elimination of fatalities task team also a key initiative

## 2014 Occupational safety milestones

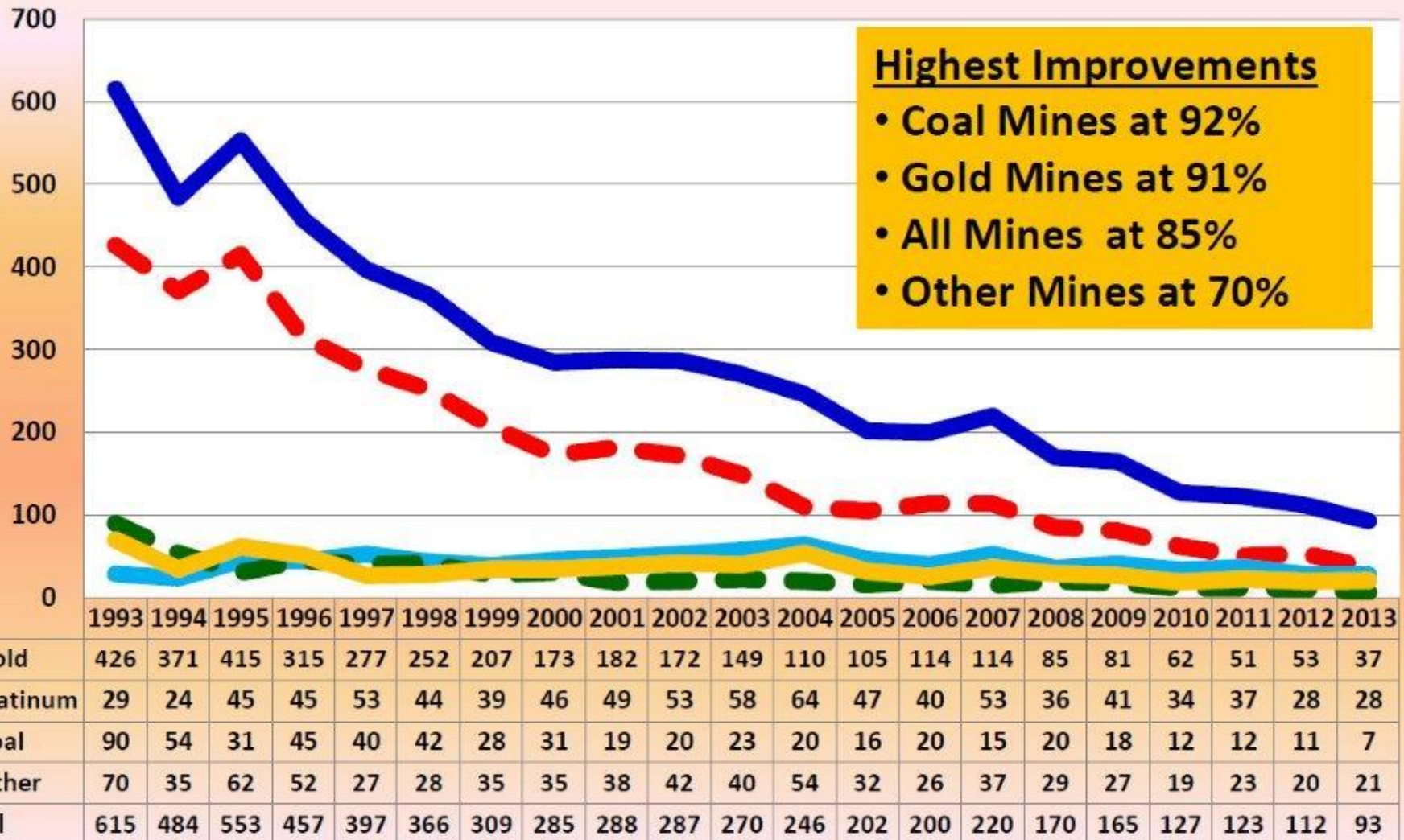
- Elimination of fatalities and injuries
  - Every mining company must have a target of ZERO FATALITIES
  - Every fatality is one too many, we will eliminate fatalities by December 2020
  - Up to December 2016, 20% reduction in serious Injuries per year
  - From January 2017, 20% reduction in Lost Time Injuries per year
  - Fall of ground present a significant obstacle to achieving zero harm

## 2014 CTF Milestones (11 Pillars)

- By December 2020 there will be 100% implementation of:

Pillar	Intention
Leadership	Leaders will lead by example in walking the Zero Harm talk
Risk Management	Seek to eliminate risks at their source and investigate root causes
Bonus and performance incentive	Zero Harm is prioritised ahead of production
Data Management	
Diversity Management	No racism, genderism or any forms of discrimination
Leading Practice (MOSH)	Take a common approach to identifying and facilitating the adoption of leading OHS practices and research outcomes

# Fatalities by Commodity

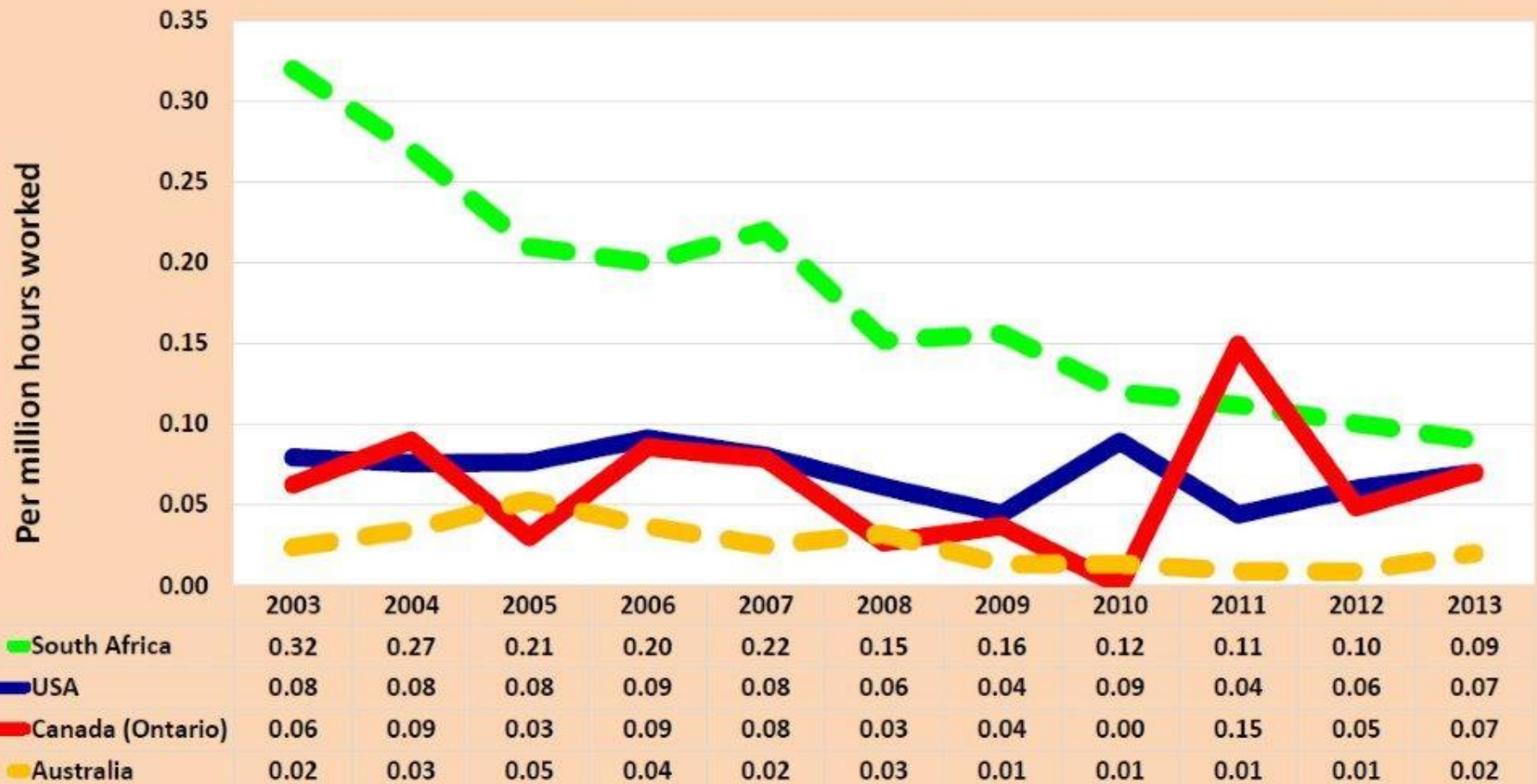




# Comparison of Fatality Rates

## All Mines

South Africa fatality rate versus Australia, Canada & USA fatality rates

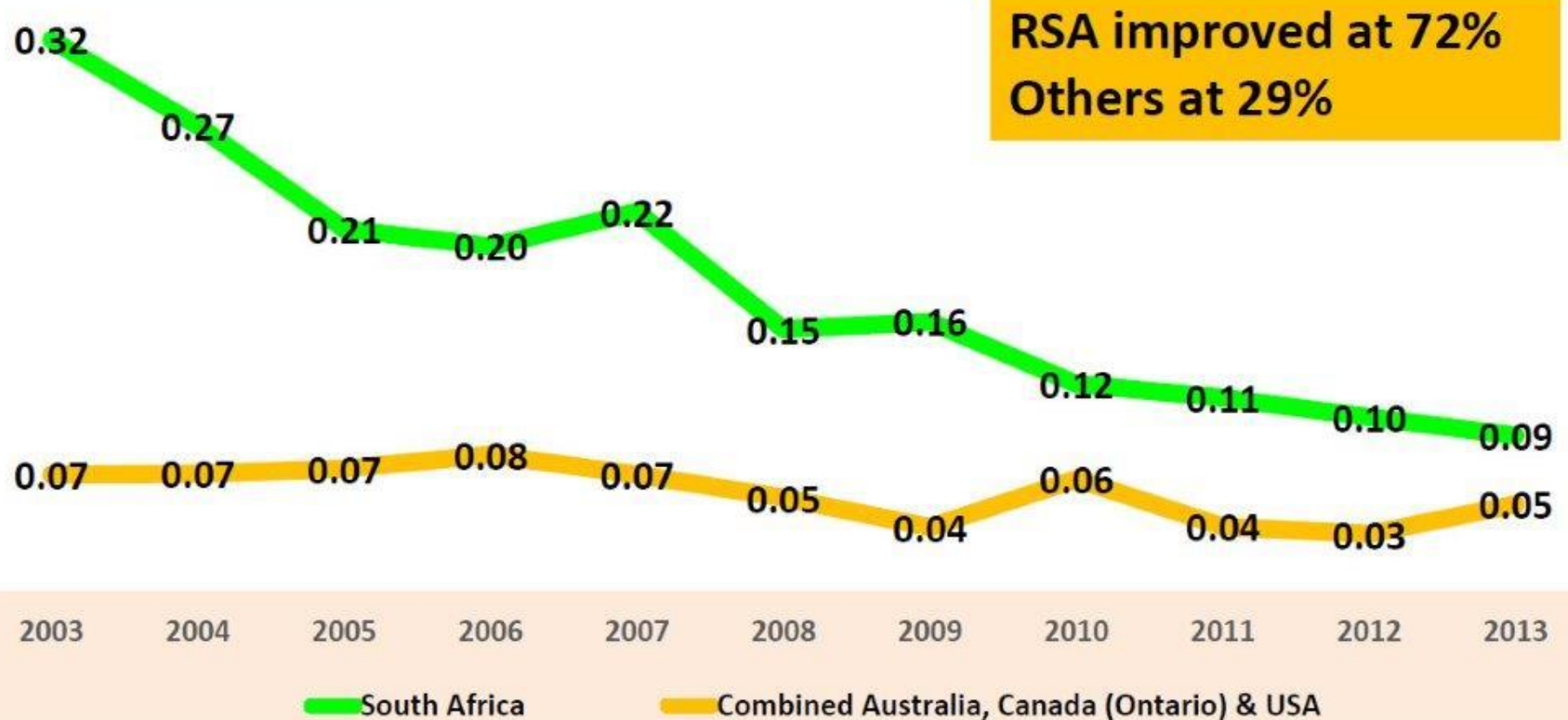




# Comparison of Fatality Rates

## All Mines

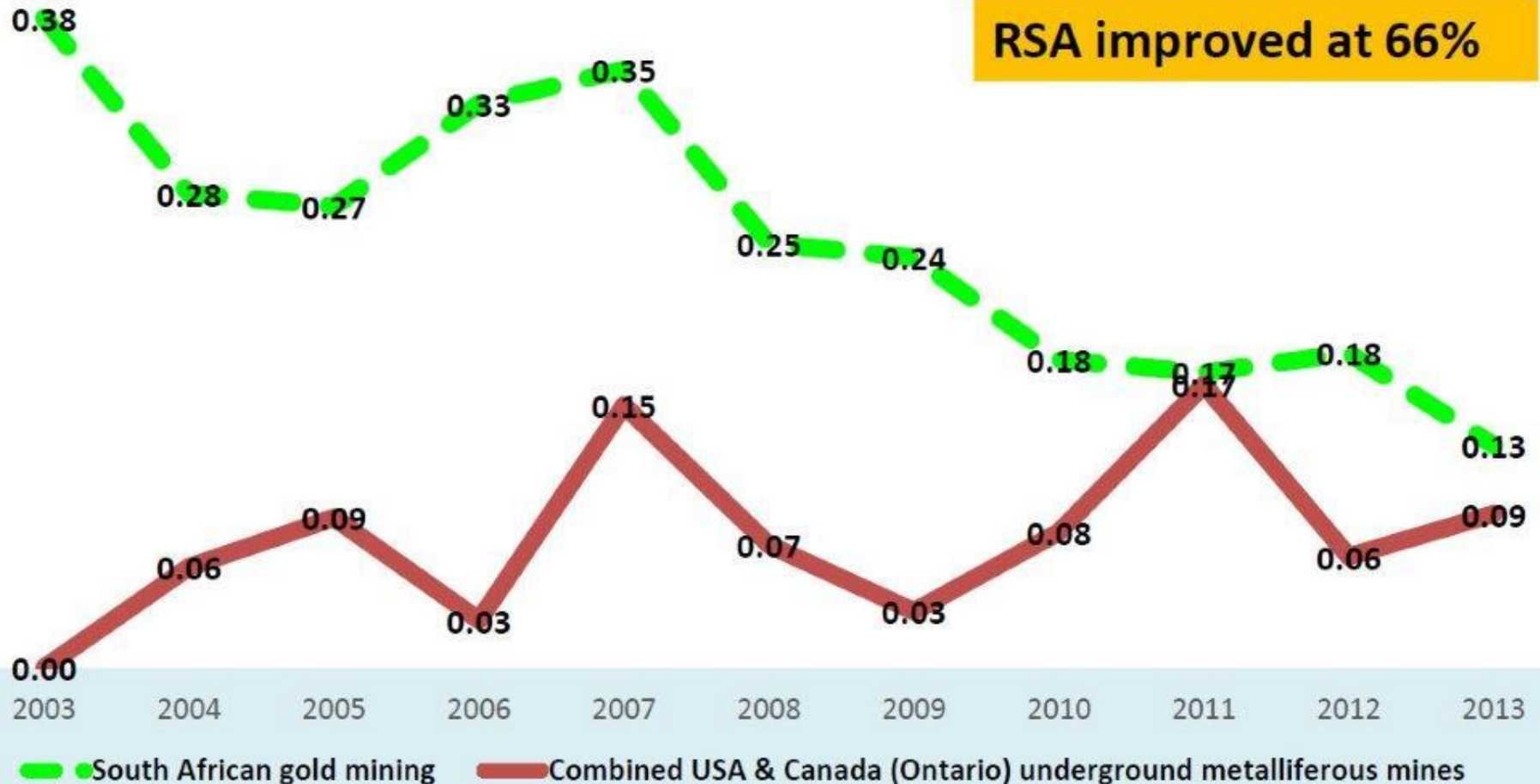
South Africa versus combined Australia,  
USA and Canada (Ontario)



# Comparison of Fatality Rates

## Gold & Metalliferous Mines

South Africa fatality rate versus USA & Canada Ontario fatality rates

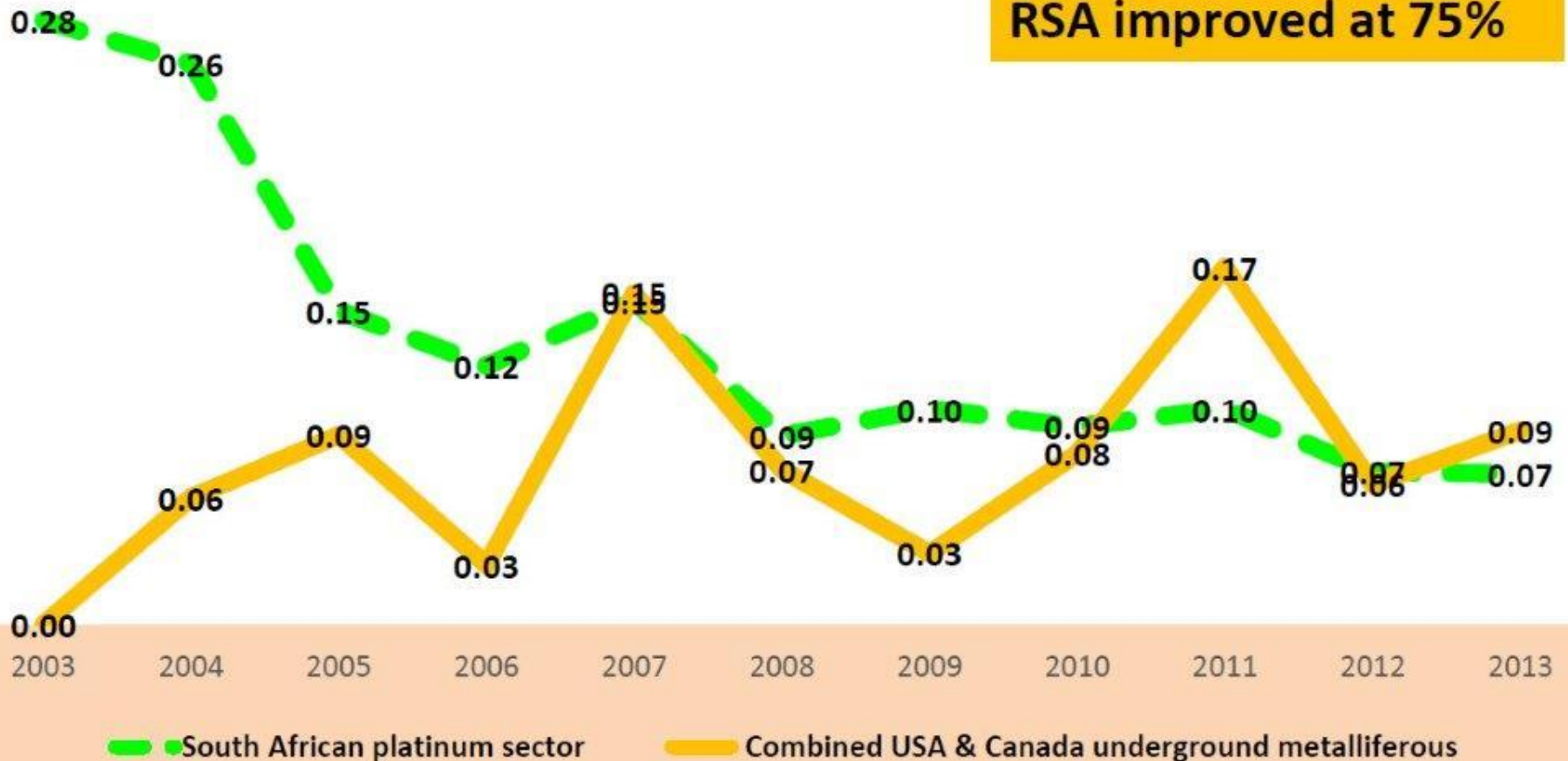


# Comparison of Fatality Rates

## Platinum & Metalliferous Mines

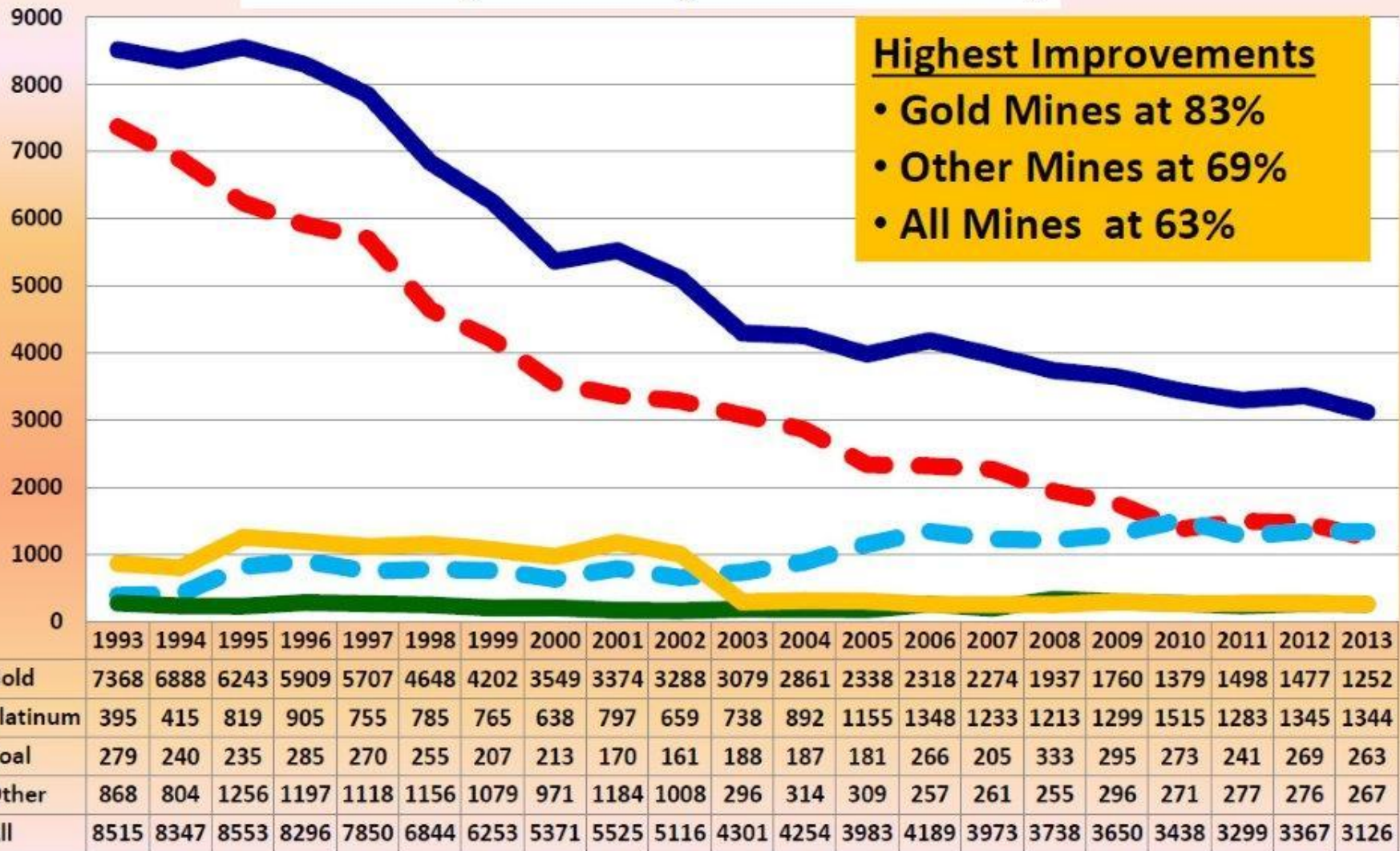
South Africa fatality rate versus USA & Canada fatality rates

RSA improved at 75%

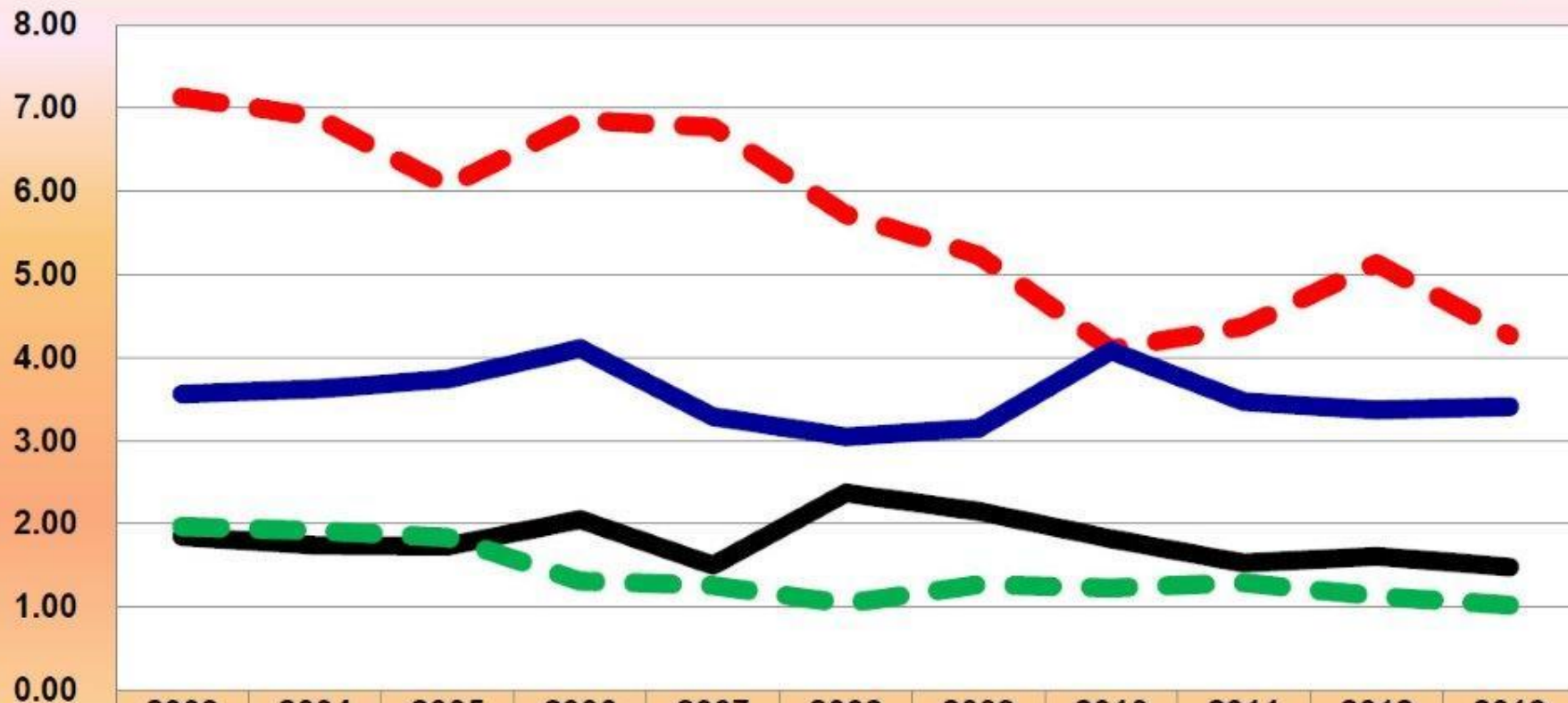




# Mine Injuries by Commodity



# Injury Frequency Rate per million hours worked

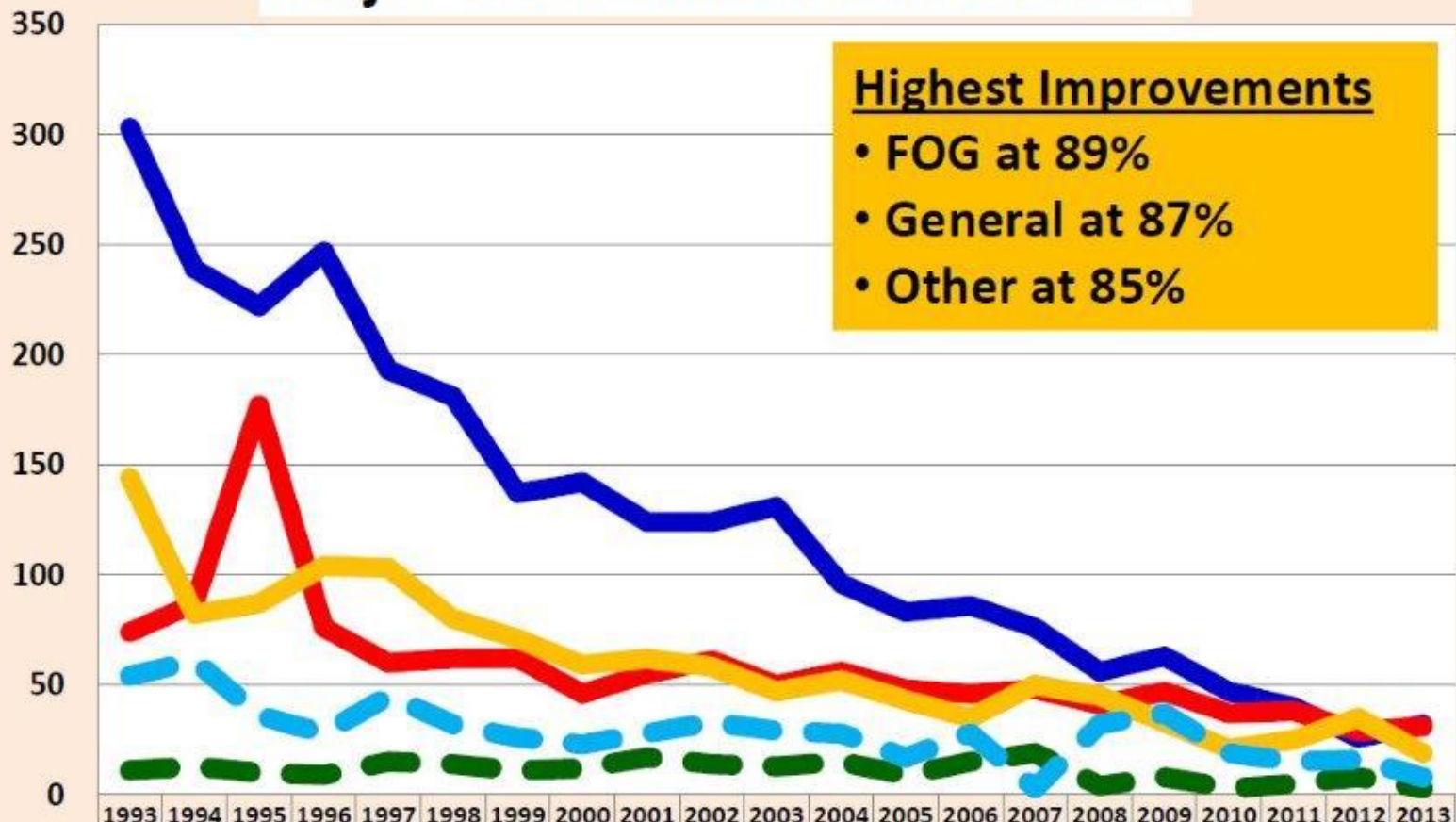


	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Gold</b>	7.13	6.90	6.06	6.86	6.77	5.72	5.23	4.1	4.37	5.13	4.27
<b>Platinum</b>	3.56	3.62	3.74	4.11	3.29	3.05	3.15	4.08	3.47	3.37	3.41
<b>Coal</b>	1.85	1.74	1.73	2.05	1.50	2.37	2.15	1.82	1.53	1.61	1.48
<b>Other</b>	1.97	1.92	1.84	1.31	1.26	1.04	1.27	1.23	1.29	1.13	1.02





# Major Contributors of Fatalities



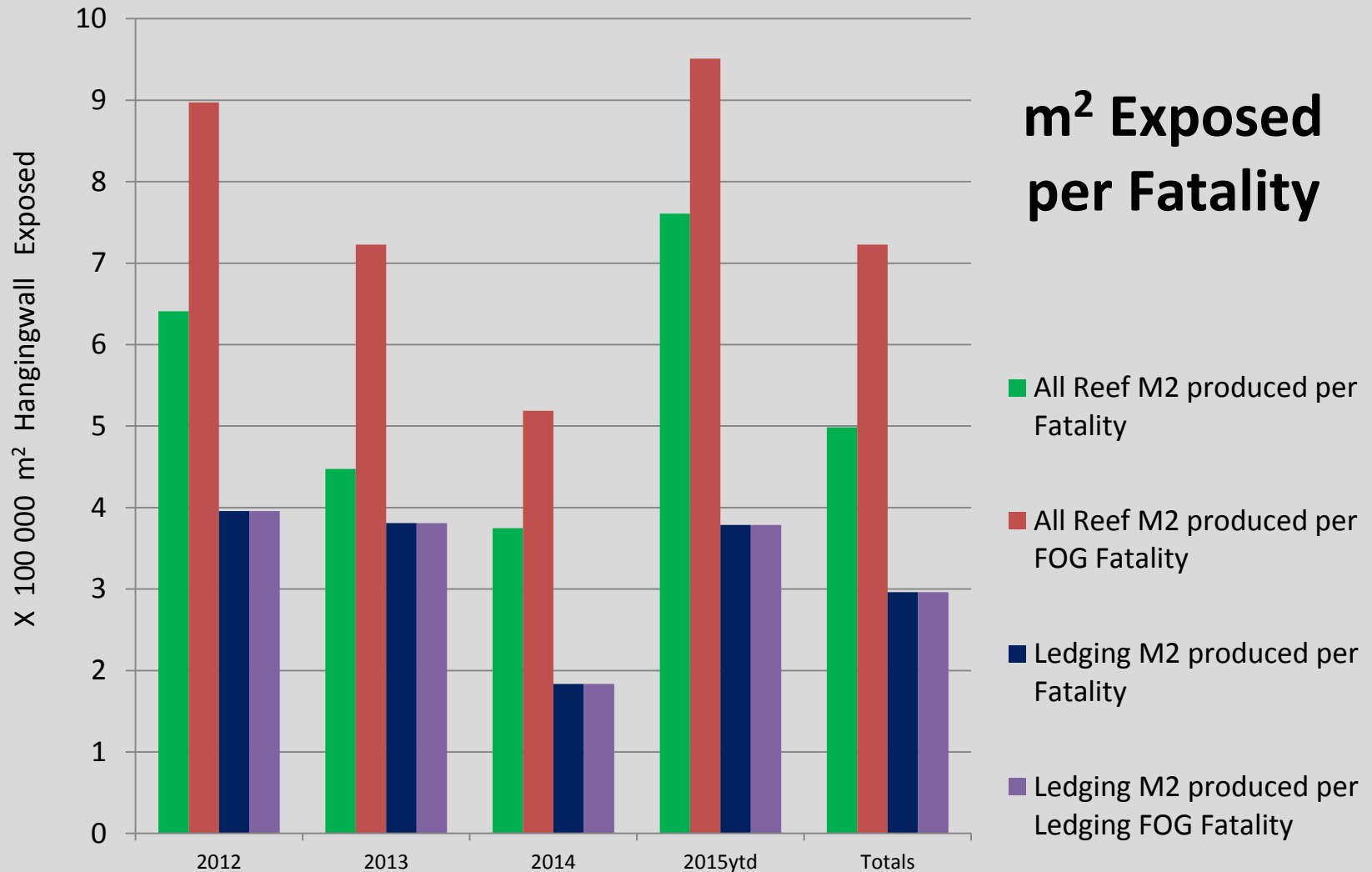
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Fall of ground</b>	303	239	222	247	193	181	137	142	124	124	131	96	83	86	76	56	63	47	40	26	32
<b>Transportation and Mining</b>	74	87	177	76	60	62	62	46	55	61	50	56	48	46	48	41	47	37	38	29	31
<b>Machinery</b>	11	13	10	9	15	14	11	12	17	14	13	15	9	15	19	4	8	3	5	8	3
<b>General</b>	144	82	87	104	103	80	71	59	62	58	47	52	43	35	50	45	33	21	25	35	19
<b>Other</b>	54	61	36	28	45	32	26	23	28	33	29	28	17	28	3	32	37	19	15	16	8





# Ledging Risk

## m<sup>2</sup> Exposed per Fatality



## Expectations from today

- Acknowledge ledging as a high risk step in the mining process
- Appreciate the potential leading practice in what is presented today
- Allow the COM 's MOSH team to assist in identifying the actual leading practice
- Commit to supporting the lead/host mine and the adoption of the leading practice
- We all support our journey to ZERO HARM:
  - “Every mineworker returning from work unharmed every day”