



SECNAV Shipyard Safety Initiative

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SECNAV Safety Focus

- **DON 2008 Objective – Provide Total workforce capability and optimize to support the National Defense Strategy**
 - Safeguard people and resources of the Navy-Marine Corps Team
- **June 2008 – SECNAV started to review civilian injury rates**
- **July 2008 – SECNAV expressed focus on the Total Force in shipyards.**
 - Shipyard employees, Ship’s force, Contractors, sub-contractors, and other government employees (i.e., SUPSHIP)
 - Concerned about contractors who infrequently visit shipyards
 - Personally saw a contractor working on a radar mast in sandals
 - “How do we ensure the contractor personnel are briefed and prepped to safely work in the SY environment (Safety brief, film, oversight, etc.)?”
- **August 2008 – NAVSEA hosted meeting of Northrop Grumman and General Dynamics Shipyard Safety Managers – Key focus areas:**
 - Risk factors that contribute to Shipyard fatalities.
 - Knowledge sharing – real need to improve.
 - Future meetings should focus on a way to share best practices and to develop methods to reduce fatalities and injuries.
- **April 2009 – NAVSEA/CRMC hosted meeting with Private Ship Repair Associations to discuss expanding this project to repair shipyards.**

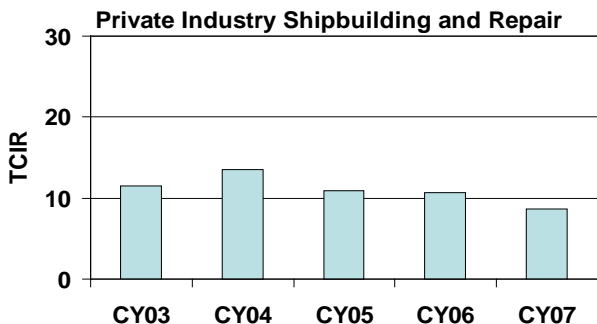


Naval Shipyards and Private Industry Shipbuilding and Repair Facilities Injury Rates

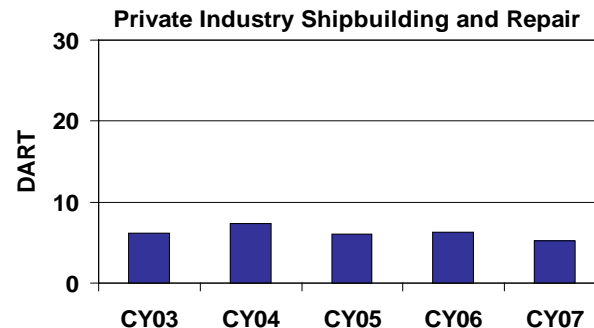
Injury Rates for all Private Industry Shipbuilding and Repair Facilities (Based on Bureau of Labor Statistics)

TCIR █
DART █

TOTAL CASE INCIDENT RATE (TCIR)

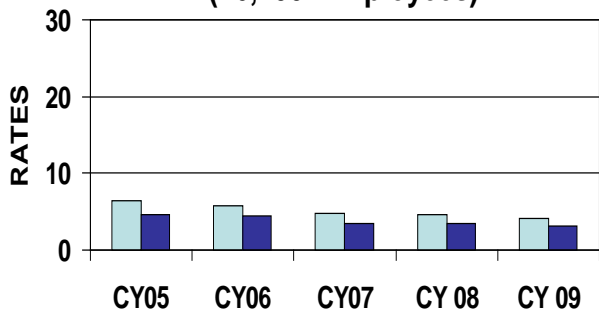


DAYS AWAY, RESTRICTED or TRANSFERRED (DART)

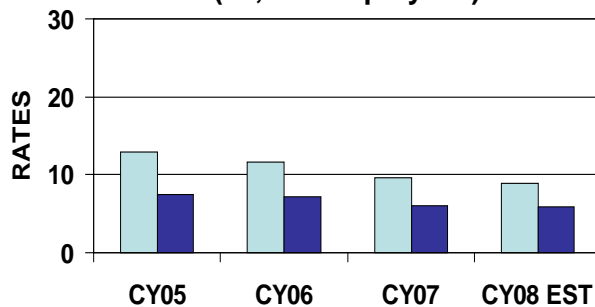


Injury Rates for Navy Shipbuilding and Repair Shipyards

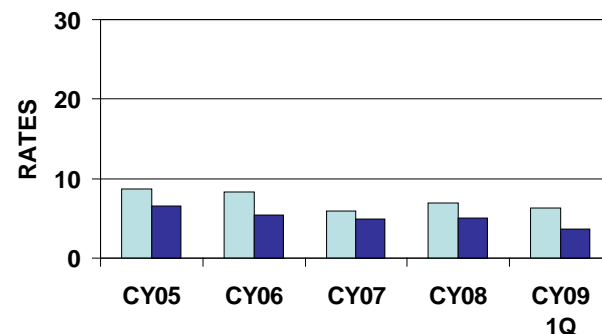
All Naval Shipyards (26,700 Employees)



Big Six Private Shipyards (50,000 Employees)



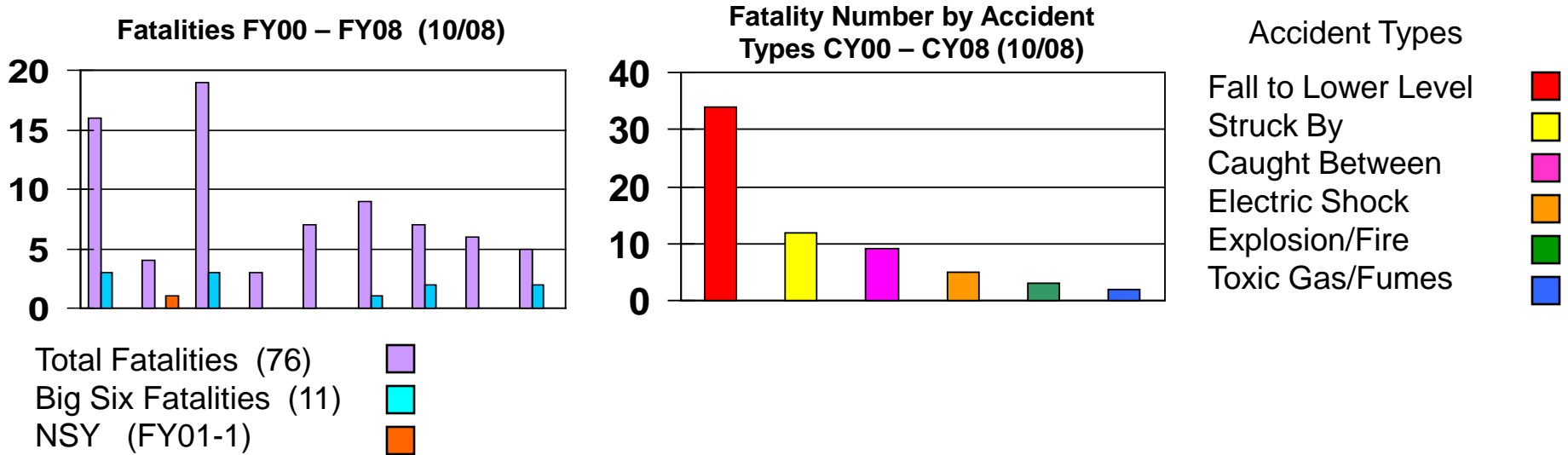
Private Repair Shipyards (SCA)



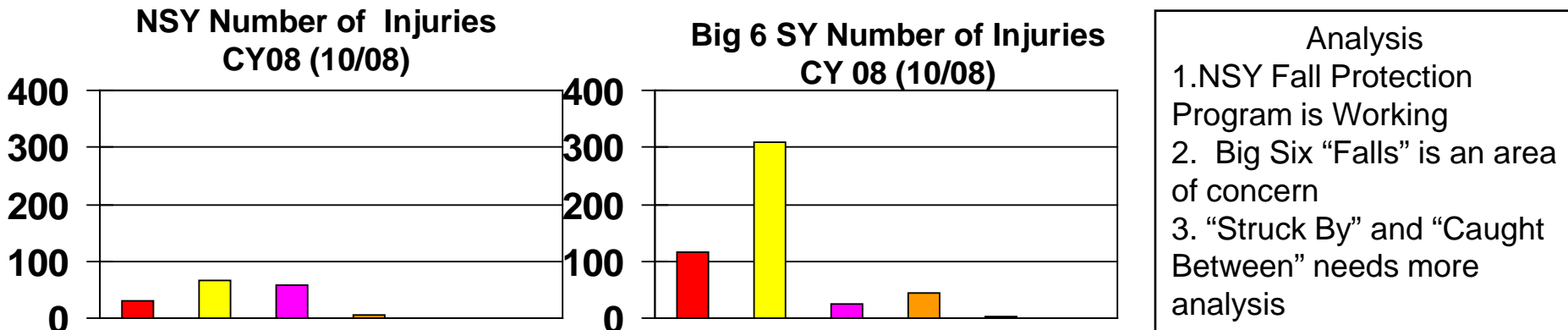
^{1Q} Rates = Cases per 100 equivalent full-time workers

Analysis of Fatalities at Shipyards

Analysis of Total Fatalities Reported to OSHA by All Shipbuilding and Repair Shipyards FY00 –FY08



Analysis of CY08 Injuries of the Top 6 Accident Type Categories

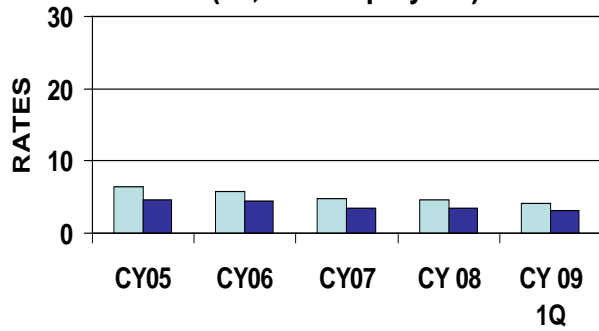


Analysis of Blue Collar Workforce

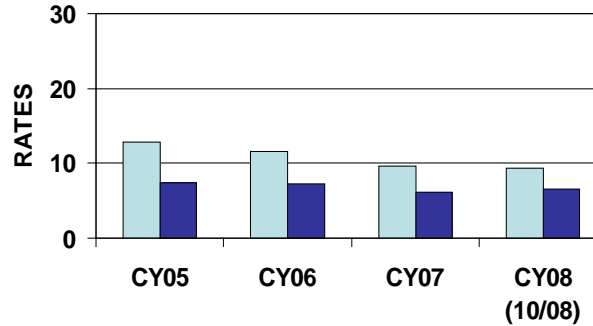
Injury Rates for Civilian Workforce

TCIR █
DART █

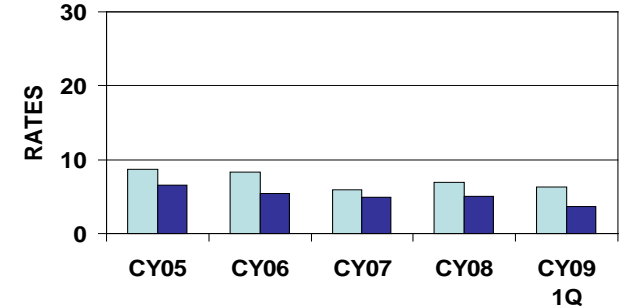
All Naval Shipyards
(26,700 Employees)



Big Six Private Shipyards

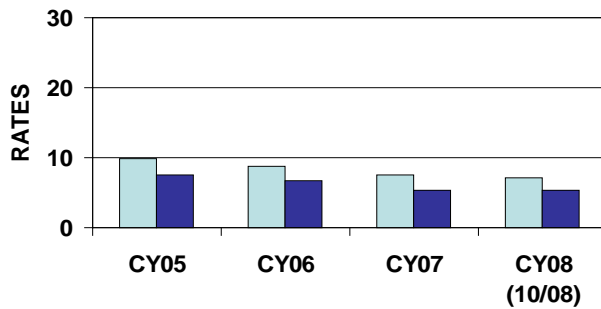


Private Repair Shipyards (SCA)

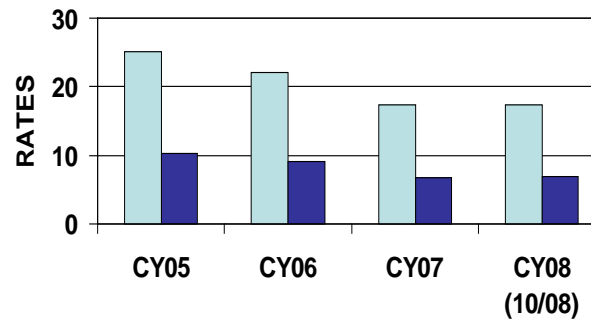


Injury Rates for Blue Collar Workforce

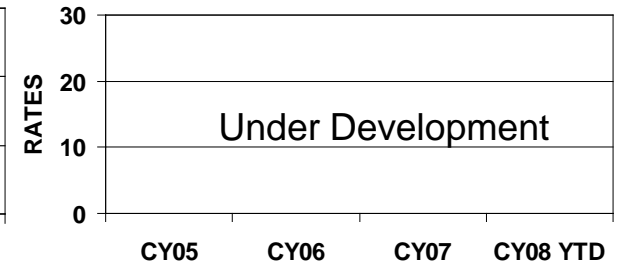
All Naval Shipyards - Blue Collar



Big Six Private Shipyards
- Blue Collar



Private Repair Shipyards
Blue Collar



This Big Six chart is under development, rates are estimates.

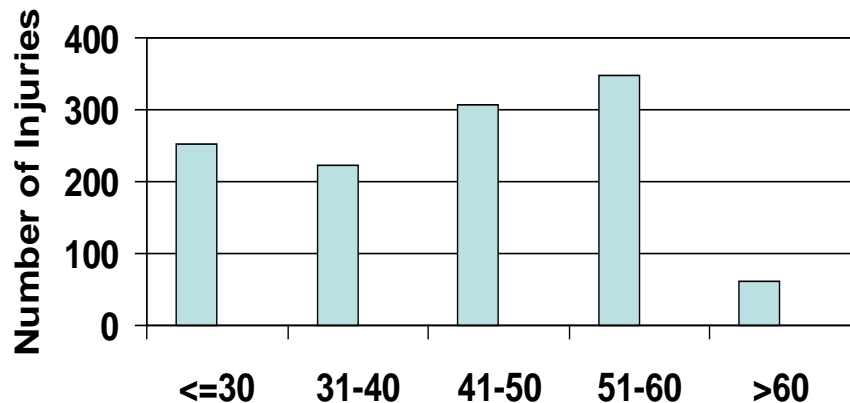
Rates = Cases per 100 equivalent full-time workers



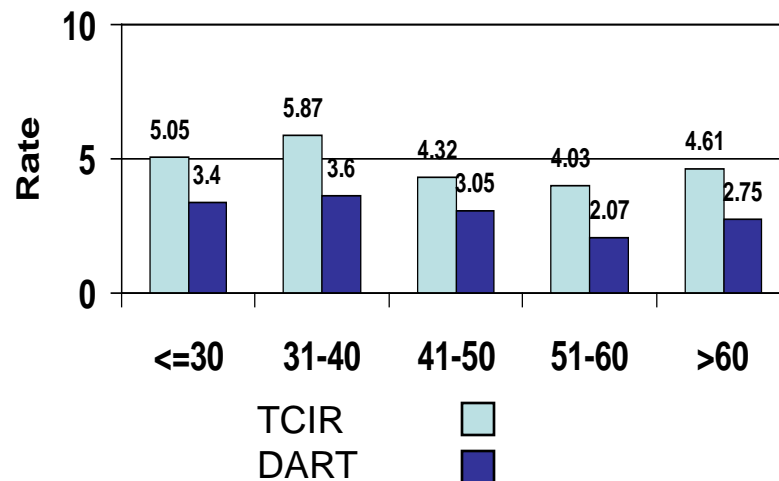
Naval Shipyards TCIR and DART by Age Group

TCIR & DART for CY 08 Segregated by Age Groups for the Naval Shipyards

Naval Shipyard Number of Injuries by Age Group CY08

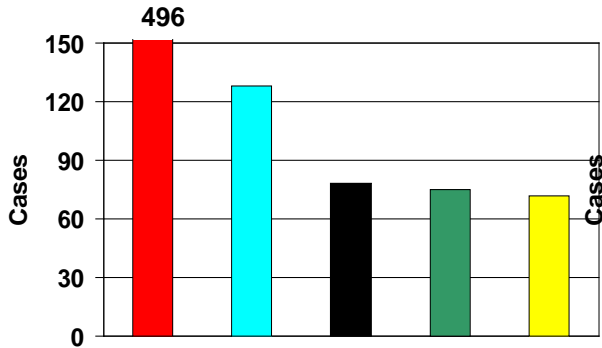


Naval Shipyard Injury Rates by Age Group CY08

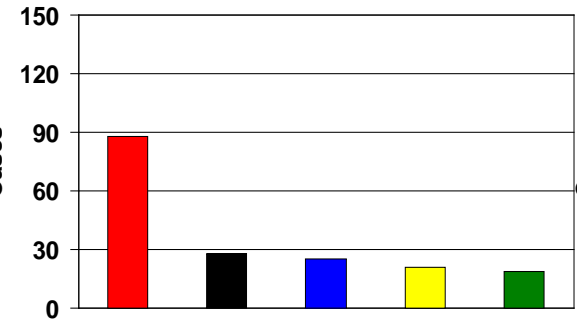


Analysis of Naval Shipyard Injuries CY08

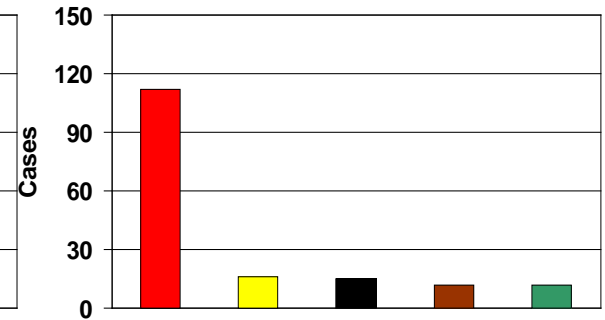
All Age Groups



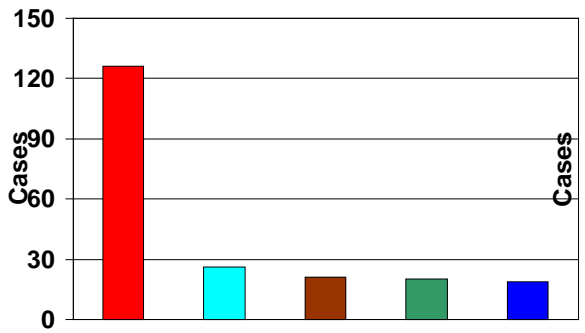
< 30 Age Group



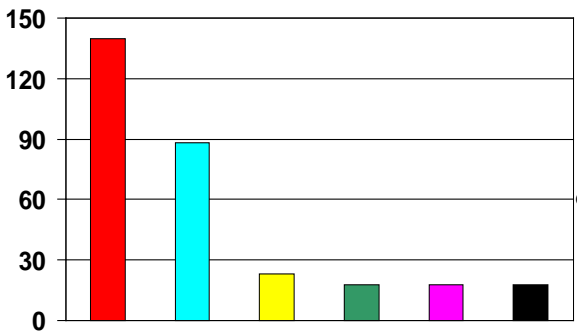
31 - 40 Age Group



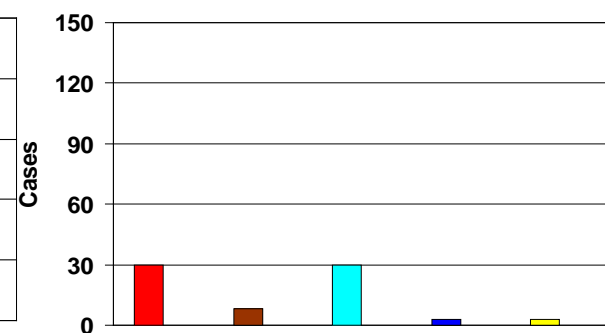
41 - 50 Age Group



51 - 60 Age Group



61 > Age Group



Ergonomic ■
 Exposure to Noise ■
 Struck By ■
 Caught Between ■

Struck Against ■
 Rubber or Abraded ■
 Fall to Same Level ■
 Fall to Lower Level ■

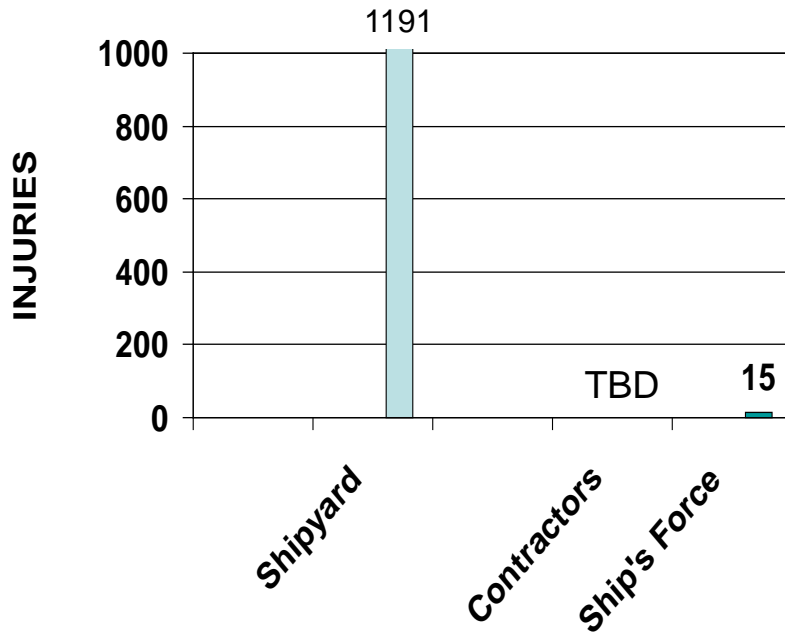
■ Ergonomic Accident Types includes overexertion and repetitive motion accidents.

Analysis of Total Force

Total Force Metrics for CY08

Total Injuries █

Naval Shipyard Total Force



Big Six Shipyards Total Force

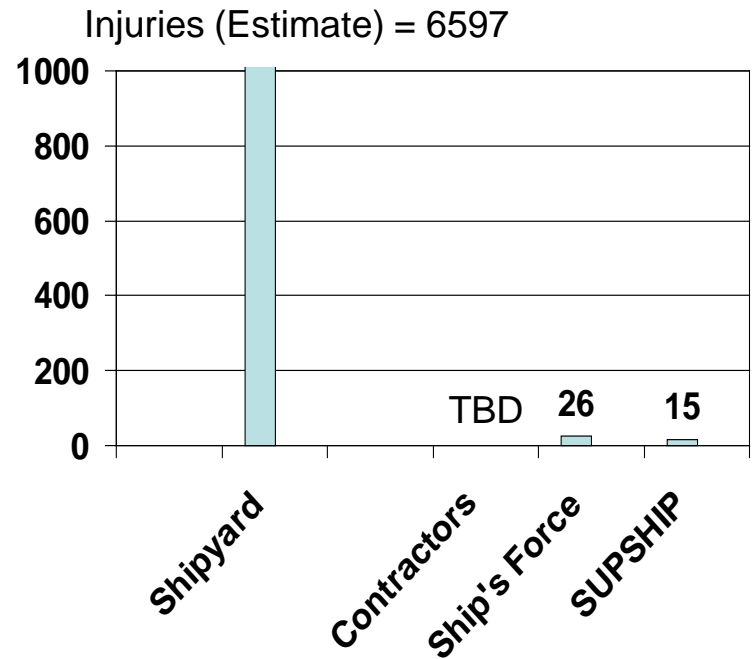


Chart Still Under Development – Contractor Data Hard to Collect



Way Ahead

- **Continue information sharing between NAVSEA and Private Shipyards**
 - **Collect and provide major shipbuilders aggregate injury statistics to improve both public and private yard safety programs**
 - **Partner major shipbuilders with Naval Shipyards to address common risks**
- **Continue dialog with Ship Repair Associations to improve safety and reduce injuries in shipyards after 20 April VTC**
- **NSRP conduct analyses of the two top causal factors for fatalities**
 - **“Struck By” injuries**
 - **“Fall to lower Level” injuries**
- **NSRP conduct analyses of shipyard injuries**
 - **Root causes**
 - **Best practices/recommendations**



Other Topics

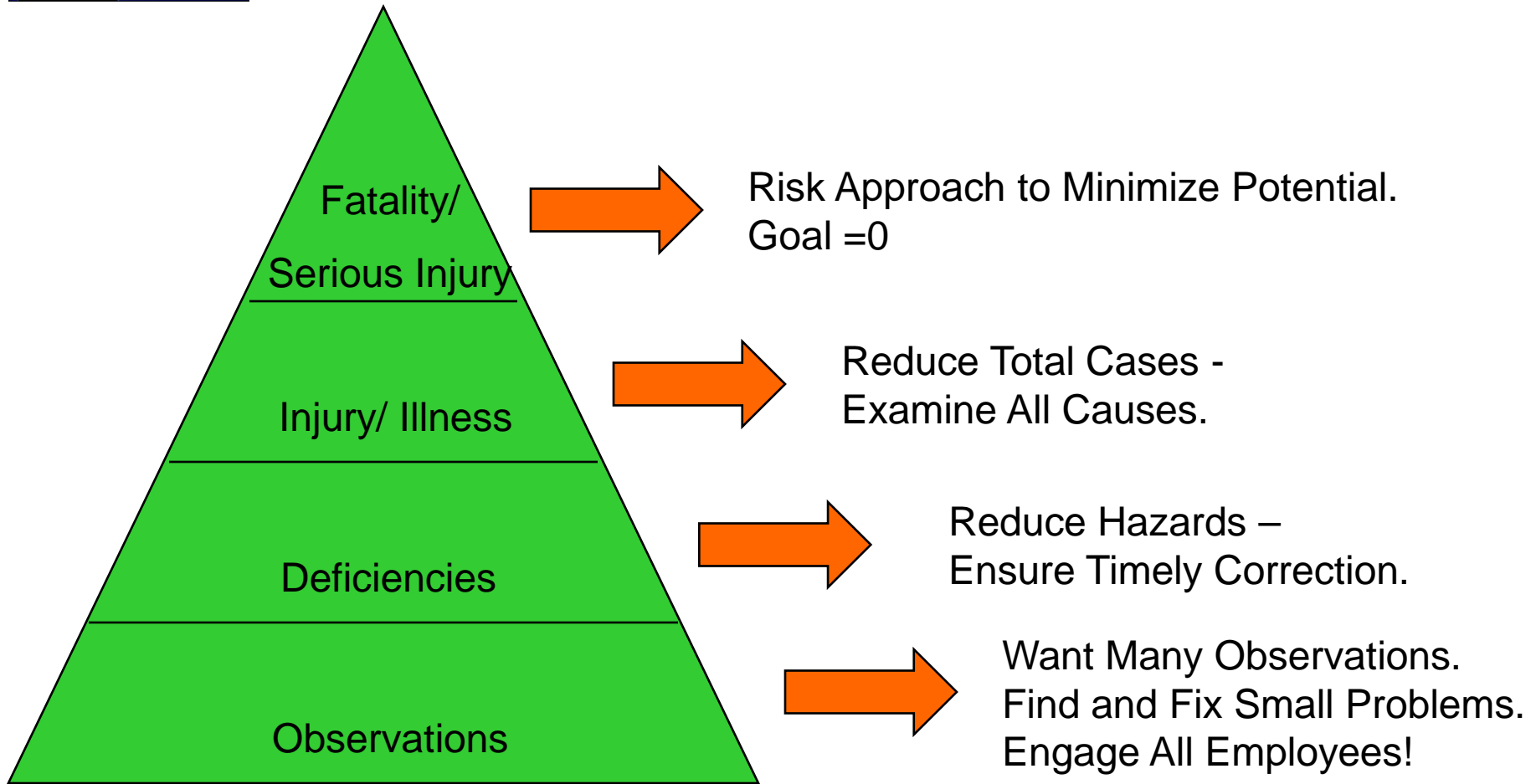
- **NAVSEA committed to OSHA VPP**
- **All Naval Shipyards are OSHA VPP Star sites**
 - Portsmouth Naval Shipyard recertified as Star Site
 - Other three Shipyards pursuing recertification with OSHA
 - May provide mentorship under VPP
- **NAVSEA HQ accepted in VPP Challenge Program, Kick-Off held June 2009**
- **NAVSEA to operate Regional Maintenance Centers**
 - Similar to current Naval Shipyards CONOPS
- **Arc Flash and High Energy Systems**
 - 4160 V for LHA, LHD, and DDG 1000 Class ships.
 - Very high voltage (13,000V) being designed for CVN 78 Class ships
- **LCS and DDG-1000 Class Manning**
 - Reduce manning will place new challenges for Navy maintenance.



Navy Safety Vision

- **Enhance mission readiness, capability, and accomplishment.**
- **Integrate safety into**
 - All on- and off-duty activities
 - Work processes and weapon system designs
- **Imbed safety culture**
 - Into the total force (military, civilians, and contractors)
 - With accountability and involvement at all levels
 - Through the adoption of a Safety Management System.
- **Facilitate continuous improvement in safety performance**
 - Manage hazards, mitigate risk, and implement actions to reduce mishaps
 - Use of annual safety program self assessments.
- **Maintain effective safety monitoring and performance measuring systems**
 - Support senior leadership and unit-specific metrics
 - Data analysis for root causes and development of mitigation strategies.
- **Employ new technology and the latest management tools**
- **Aggressively and transparently communicate**
 - Safety successes, share hazard awareness and share near-miss lessons learned.
- **Enable safety performance**
 - Develop and maintain a workforce of talented and skilled safety personnel, both military and civilian, that supports the seamless integration of safety into all work processes, products, and operations.

Principled Approach to Safety



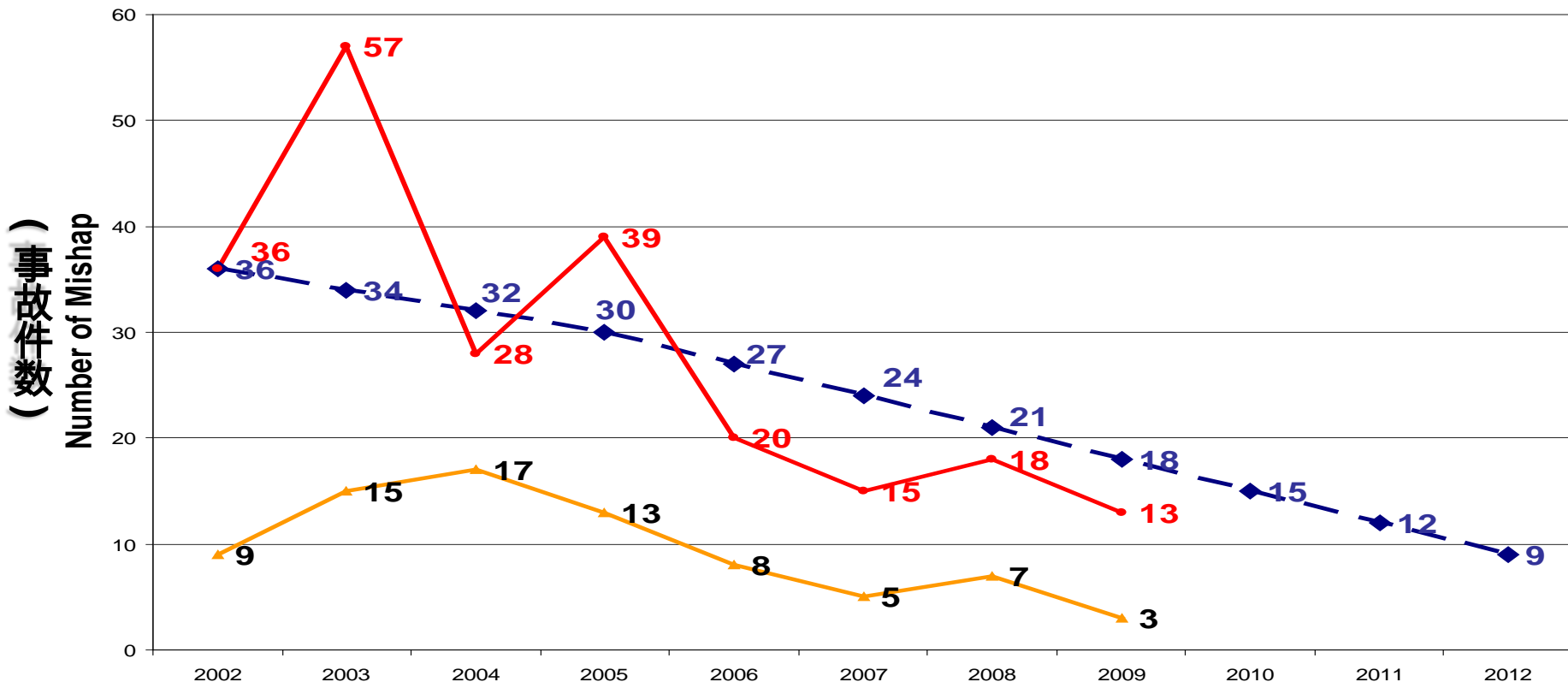
**IMPROVE OVERALL EFFECTIVENESS AND MISSION ACCOMPLISHMENT.
IMPROVE REAL SAFETY.**

FY09 SRF-JRMC MISHAP REDUCTION GOAL

2009年SRF-JRMC事故削減目標

“Reduce the number of mishaps and accident rates by at least 75% by year 2012.”

“会計年度2012年終了までに総事故件数を75%削減する”



(Baseline)

Fiscal Year

◆ - Number of Mishap Target

● - Number of Mishap Actual

▲ - LWC Actual

(総事故件数削減目標)

(現状)

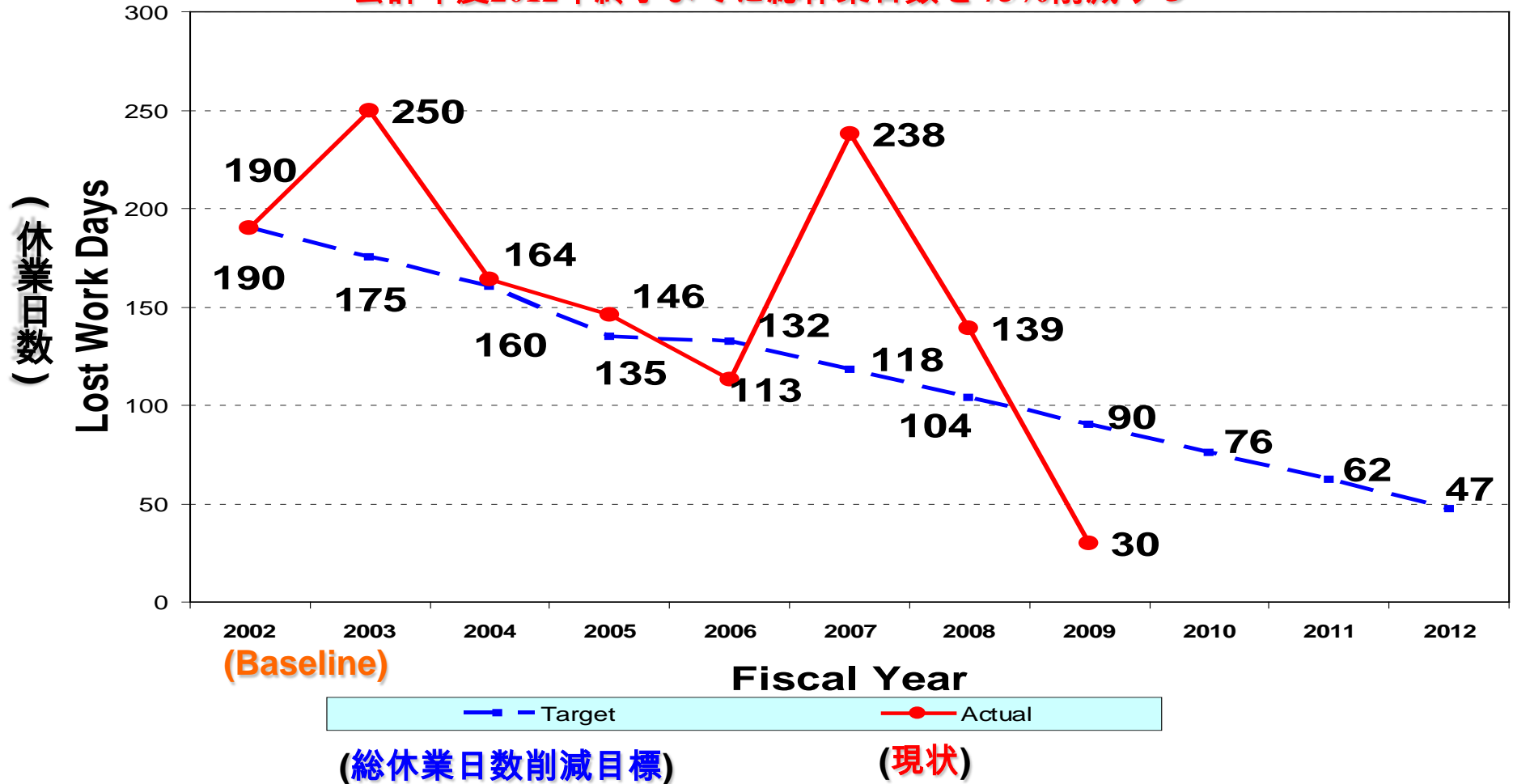
(現状)

FY09 SRF-JRMC LOST WORKDAY REDUCTION GOAL

2009年SRF-JRMC休業日数削減目標

“Reduce the number of lost workdays by at least 75 % by year 2012”

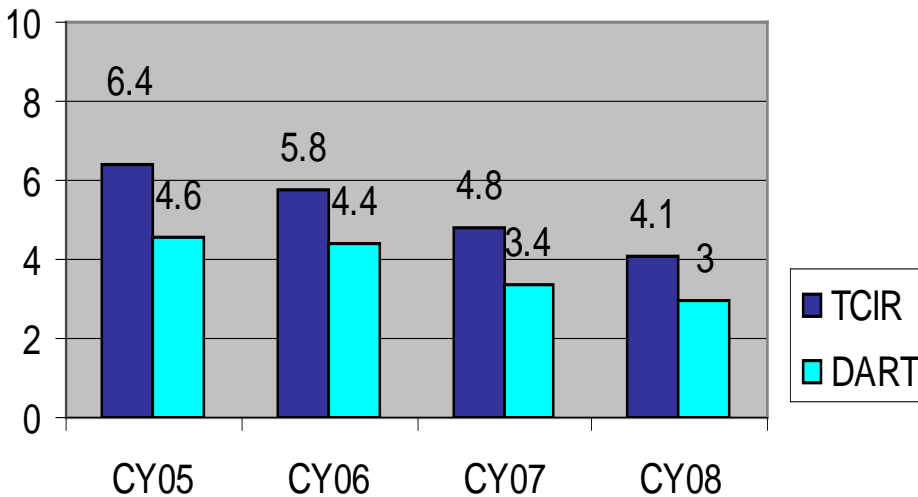
“会計年度2012年終了までに総休業日数を75%削減する”



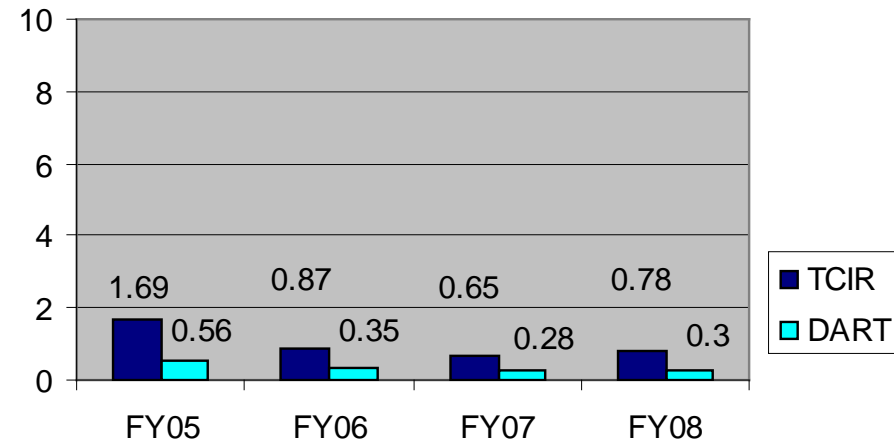


NAVAL Shipyards and SRF-JRMC

Total Case Incident Rate (TCIR) & Days Away, Restricted or Transferred (DART)



**All Naval Shipyards
(From NAVSEA SEA04R)**



SRF-JRMC

Rates: Cases per 100 equivalent full-time workers

Attachment (3-1)