



Fail Safe or Fail Lucky?

DROPS ASIA WEBINAR

23 June 2022
3PM SGT



Sponsored by





Agenda

3PM SGT Presentations

- Beng Hooi Shi (Shell Malaysia)
- David Jamieson (Bowtie Master)

330PM SGT Panel Discussion

- Speakers +
- Wayne Bauer (Vantage Drilling)
- William Lai (Baker Hughes)

4PM SGT Virtual Networking Reception

- in the DROPS Metaverse

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Dropsafe®



AXESS



Design and Verification
Developing a strong DROPS philosophy during the design and construction phase.

Baseline Survey
Establishing a suitable DROPS strategy to monitor year-on-year changes.



Inspection System for Rig Crew

Implementing systems with tailored checklists and manuals to prevent accidents.

3rd Party Inspection

Ensuring that the assets and internal controls of assets of personnel

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www.dropsmetaverse.org/apps



CERTIFICATE OF ATTENDANCE



this is to certify that

Insert Name

has attended the DROPS Asia Webinar

Fail Safe or Fail Lucky

On behalf of the DROPS Asia Steering Committee
23 June 2022

Joachim van der Meulen

Event
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gbozoleq p4
gavuz





DROPS Webinar on Fail Safe and Fail Lucky

Failed Lucky or
Failed Safe?



https://www.linkedin.com/posts/john-ogwumike-3286882_omg-luckiest-people-what-is-the-lesson-activity-6933513515160715264-SoqO?utm_source=linkedin_share&utm_medium=member_desktop_web

Failing Safely (HiPo EVENT) vs. Failing Lucky (HiPo INCIDENT)

Mindset

- Recognize that people make mistakes and unforeseen events can occur
- Aim to make sure people don't get hurt when things 'fail', so ensure protective barriers are in place

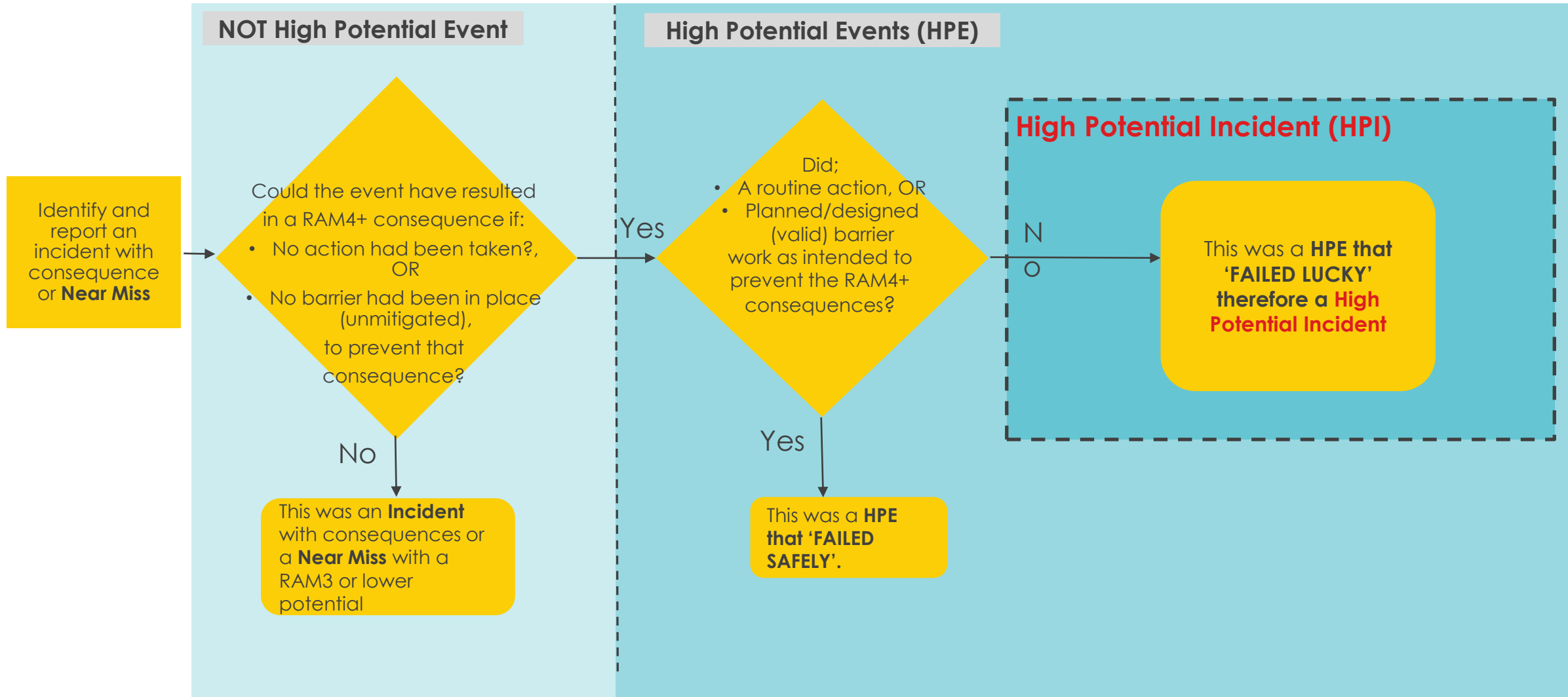
What is Failing Lucky (HPI)?

- Something fails and it was only luck that mean no one was hurt
- Barriers not in place, effective nor used
- HPI – High Potential Incident

What is Failing Safely (HPE)?

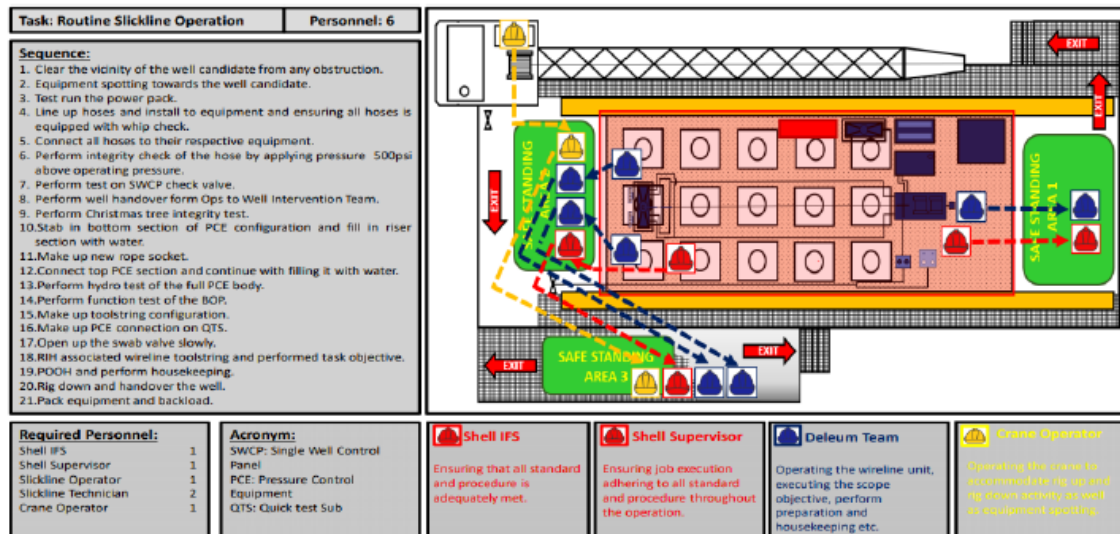
- Something fails but effective barriers removed the chance of someone getting hurt
- Strong hard barriers and good behaviors
- HPE – High Potential Event
- In the past these events got 'lost' in reporting, but they help us learn and show where our barriers are effective

Fail Safe and Fail Lucky – Process Flow



Job by Design

- Job by Design (JBD) is a concept to consistently drive predictable outcomes in a complex work environment.
- With JBD, we can simplify critical operations or routine work into a one-pager with key information such as: Job Steps, Optimum Personnel, Travel Paths, Line of Fire and Zone Management.
- JBD enhances our operational controls through consistency, robust planning and procedures, and risk identification & mitigation.
- JBD specifies resourcing requirements (people), equipment & travel paths, key job steps (procedures).



Key Components of Job by Design



Key Job Steps

- Specify clear Job Steps. What are the focus areas?
- Identify associated hazards/mitigations.
- Reference assigned personnel and who does what.



Optimum Personnel

- Who needs to be in the area and what are their positions relative to each other & the equipment?
- Optimize required personnel for task
- Use of color-code for different personnel by departments.



Travel Paths

- What is moving and where?
- Both equipment and personnel movement should be defined
- Includes zone classification, escape routes, safety step-back areas, as well as staged equipment



Line of Fire

- What are the related hazards & risks?
- Identify line of fire hazards; human=equipment interface
- Plan for personnel to be within designated Safe Zones or removed from the Line of Fire.



Zone Management

- Assign a Zone owner
- ZO is responsible for controlling the hazards and entry to the zone applying "Own the Zone" Principles.



Bowtie Master Presentation



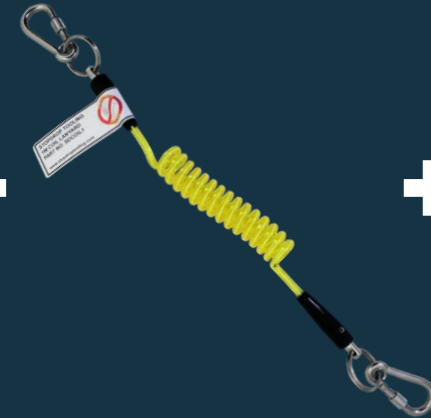
Shell Malaysia

Reliable Engineered Tools for working at Height

- Engineered Tools for Working at Height
- Simple and reliable securing
- 100% secured going up and down
- DROPS Recommended Practice



+



+





SHACKLES AT 300 FEET? HERE IS OUR CATCH.

- Double safety
- All components can be tethered
- Rotating disc on nut for easy assembly

Green Pin® Catch Shackle | greenpin.com/catch

Axess - DROPS Specialist



Site Surveys

- Baseline Inspections
- Third Party Inspections
- Closing of Findings

eDROPS



Software

- Offline/online modes
- Use of Tablets
- Taylor-made for crew



Training

- Online or Classroom
- Multi-language
- Practical on Metaverse



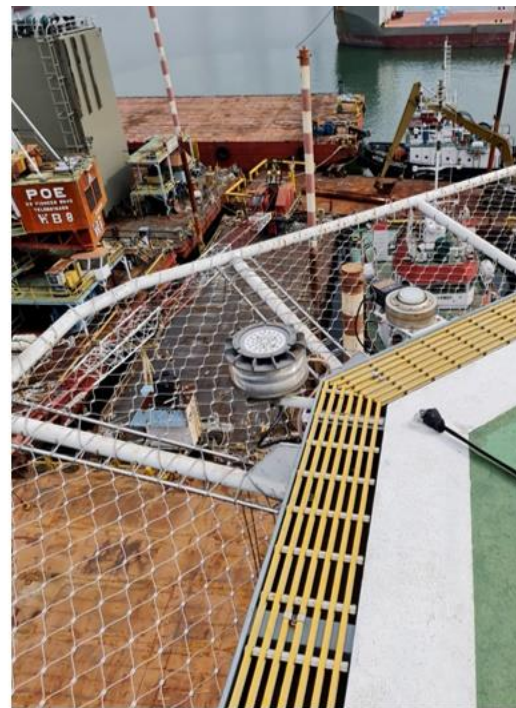
Dropsafe creates solutions to prevent objects falling from height, and has been your global partner in drops prevention for over 20 years. We offer all the tools, advice and resources you need to tackle drops risks comprehensively, sustainably, and in a time- and cost-effective manner.



Dropsafe Barrier



Dropsafe Net



**Dropsafe Helideck
Perimeter Safety Net**



**Dropsafe Pouch &
Accessories**

Let's Lift Less

What you don't lift, you can't drop!



Implementation in UK

- Lift minimization sessions held with contractors
- Dedicated logistic coordinators
- Record unnecessary lifts using observation cards.
- Counting total lifts and lifts saved.
- Using software for cargo load out and deck management
- Developed lift minimization prompt card.
- Container and basket sharing between contractors

LIFT MINIMISATION PROMPT CARD

Do we need to lift it?

- Is this lift essential, or is it a nice to have?

Is this the best way to lift it?

- Prioritisation – Is there a lifting schedule in place?
- If in doubt – contact **logistics co-ordinator**
- Deck Chess – are we thinking 3 lifts ahead?
- How does this impact other work sites?

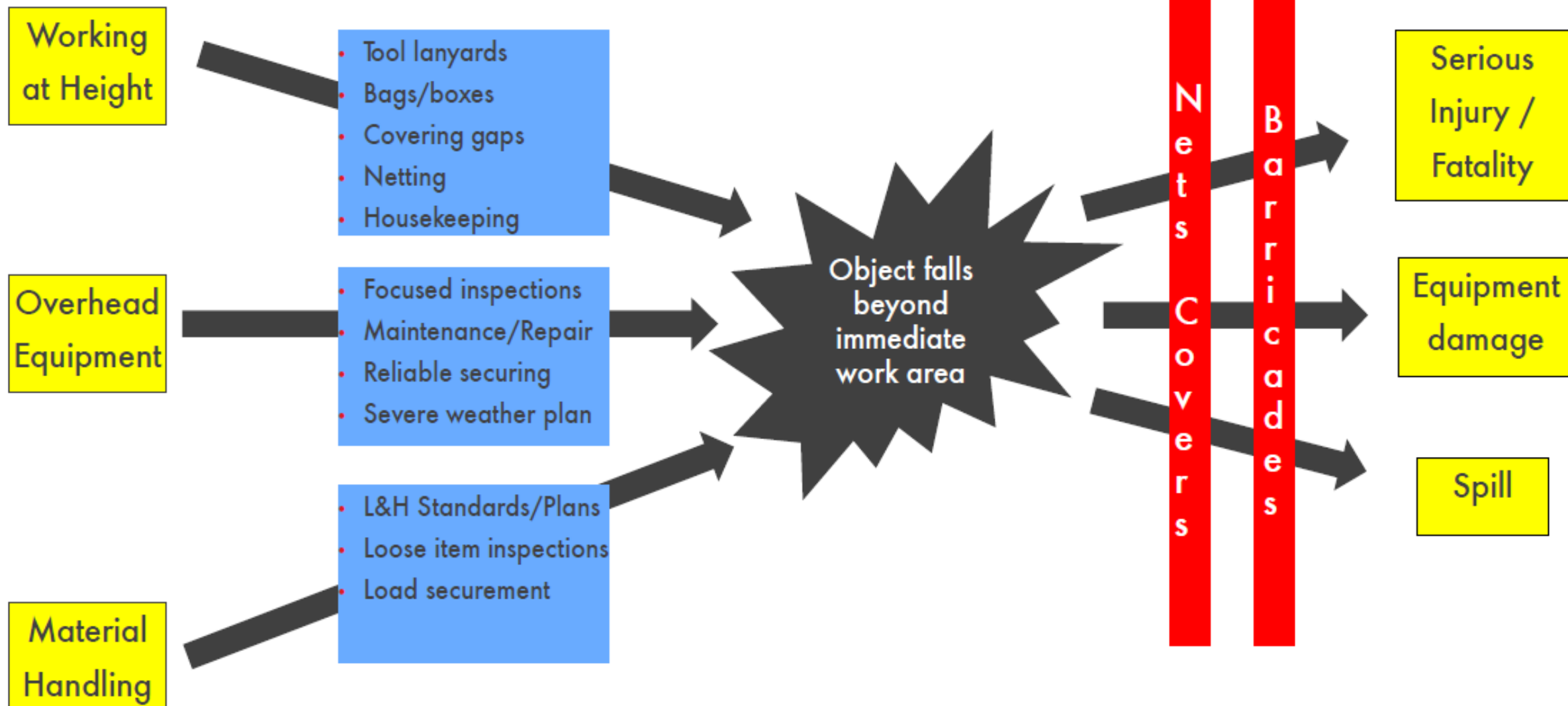
After each lift, ask...

Can we improve next time?

- Were there any learnings from the operation?
- Did anything change during the job?
- How have the learnings been shared?

Record using on site observation card system

DROPS Bowtie



Shell Dropped Object Prevention Guide

Enabling Systems:

- Documented procedure
- DROPS Focal Points
- Awareness and Training
- Hazard Hunts
- Contractor engagement/ownership
- Risk ranking, incident management
- Monitor with leading indicators
- Annual effectiveness Review

Controls – Material Handling:

- Minimize transport by hand and storage at height;
Secure
- Inspect before moving – loose objects, load securement
- Material handling plans for larger activities

Controls – Working at Height:

- PLAN to reduce exposure
- Pre-job DROPS risk assessment
- Hierarchy of controls (Reduce, Secure, Contain, Isolate)
- RAM 3/4: at least TWO independent, effective physical barriers; RAM 1/2: at least ONE
- PPE and personal accessories
- Housekeeping

Controls – Overhead Equipment:

- Use Reliable Securing for new/replacement equipment
- Systematic, risk-based inspection program: equipment type, high traffic areas, large fall distances, vibration, etc.
- Tracking of repairs until closure

Failing Safely

- ❑ Multiple layers of control
 - More risk / more layers – hierarchy of controls
- ❑ Robust barricades or exclusion zones
 - Are you sure no one will be down there?
- ❑ Safety securing
 - You can't barricade everywhere

Better Barricades	Base	Strongly Recom - mended	Encouraged	Consider
Complete in all directions	Y			
Labeled with date, hazard, owner, contact number	Y			
Visible	Y			
Removed when hazard is no longer present	Y			
Large enough to protect from hazard	Y			
All levels of access controlled (3D, 360°)	Y			
Single, accountable owner	Y			
Made from sturdier, more visible materials; no plastic tape		Y		
Single, well-marked point of entry		Y		
Scaffolders are outside of barricade when not performing necessary activities		Y		
Report barricade issues (breaches, poor condition) as UAC and investigate		Y		
Shared barricades must be indicated on labels and in PTW/JSA		Y		
Minimum size specification (e.g. 1:3) with agreed deviation process		Y		
Dedicated "barricade attendant"			Y	
Digital barricades / Zone management with electronic devices				Y
Entry/exit log with list of allowed people inside barricade				Y

