MCA - HUMAN ELEMENT GUIDANCE
The Deadly Dozen - 12 Significant People Factors in Maritime Safety

There is a wide range of contributory factors that result in maritime accidents, incidents and errors. Most result from a combination of several, even many, different contributory factors ranging from purely technical failures to environmental, systemic, procedural, competence and behavioural factors.
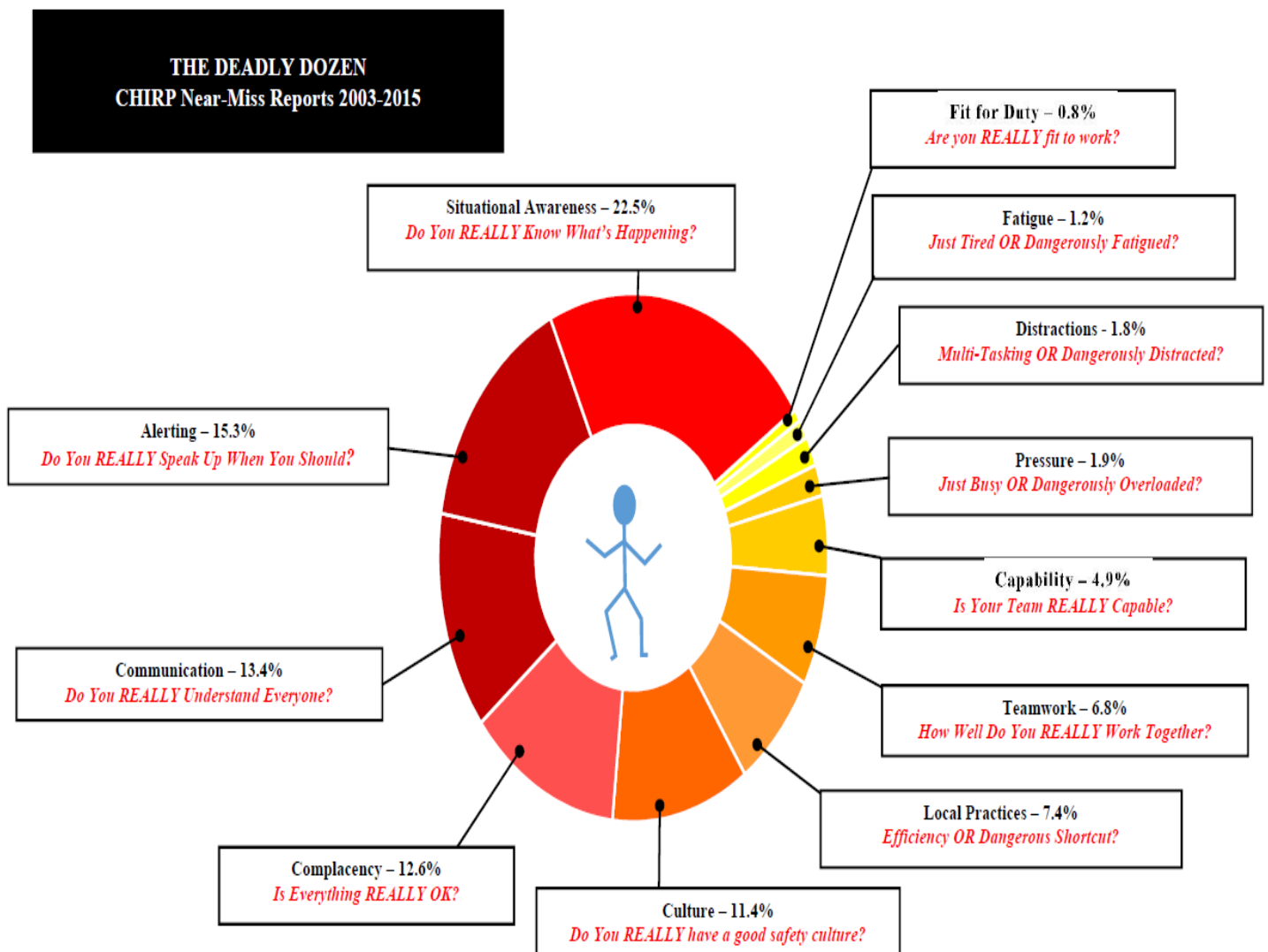
A consistently occurring factor throughout almost all accidents, incidents and errors is the **human element –** people's ability and capability to deal effectively and safely with the complexity, difficulty, pressures and workload of their daily tasks, not only in emergency situations but also during routine operations.

The majority of these accidents, incidents and errors are potentially avoidable if peoples' understanding, actions and behaviour were different.

This bulletin (By MCA – Maritime and coast guard agency) provides a summary of twelve of the most common people related factors (**the Deadly Dozen**) along with tips and learning points which, if managed effectively have the potential to avoid and avert accidents, and make a dramatic improvement to maritime safety.

They are the twelve most common conditions that can influence or act as pre-cursers to human error, leading to accidents or incidents. It is not a comprehensive list of accident and incident pre-cursers, indeed, there are several hundred possible pre-cursers. However, experience shows that the Deadly Dozen provides a useful and pragmatic introduction to understanding aspects of human error in organisations and workplaces.

"The Deadly Dozen" – a diagram showing analysis of the breakdown of the twelve factors by near miss reports submitted to CHIRP Maritime

THE DEADLY DOZEN
CHIRP Near-Miss Reports 2003-2015

Situational Awareness – 22.5%
Do You REALLY Know What's Happening?

Fit for Duty – 0.8%
Are you REALLY fit to work?

Fatigue – 1.2%
Just Tired OR Dangerously Fatigued?

Distractions - 1.8%
Multi-Tasking OR Dangerously Distracted?

Alerting – 15.3%
Do You REALLY Speak Up When You Should?

Pressure – 1.9%
Just Busy OR Dangerously Overloaded?

Capability – 4.9%
Is Your Team REALLY Capable?

Communication – 13.4%
Do You REALLY Understand Everyone?

Teamwork – 6.8%
How Well Do You REALLY Work Together?

Local Practices – 7.4%
Efficiency OR Dangerous Shortcut?

Complacency – 12.6%
Is Everything REALLY OK?

Culture – 11.4%
Do You REALLY have a good safety culture?

The Deadly Dozen

Situational Awareness
Do You REALLY Know What's Happening?
∗The Big Picture AND fine detail
∗Constantly update your awareness
∗Actively seek input from others
∗Never assume another's intentions
∗WHIM – ask: "What Have I Missed?"

Alerting
Do You REALLY Speak Up When You Should?
∗Vital skill – use it effectively – encourage it
∗Be positive and constructive – propose solutions
∗Some may find it difficult to do
∗It's not a threat – it's good teamwork
∗Be assertive – it can save lives!

Communication
Do You REALLY Understand Everyone?
∗Message understood? DON'T' assume - CHECK
∗Use closed loop communications
∗Words are only 30% of communication
∗Remember effect of tone and body language
∗Different cultures may interpret things differently
∗Watch out for accidentally causing offence

Complacency
Is Everything REALLY OK?
∗Never assume all is OK
∗Follow procedures – they work!
∗Use checklists
∗Seek input from others
∗Early action avoids later difficulties
∗Check your situation - CONSTANTLY

Culture
Do You REALLY have a good safety culture?
∗Applies to individuals and whole teams/organisations
∗Does everyone really care about safety?
∗Do you have a Just Culture?
∗Do you strive for continual improvement?

Fit for Duty
Are you REALLY fit to work?
∗Avoid alcohol and drugs – they are major killers
∗Illness can impair judgement and thinking
∗Injuries can be distracting

Fatigue
Just Tired OR Dangerously Fatigued?
∗DON'T accept it - It's a killer!
∗Leads to accidents and ill health
∗Ever present danger at sea
∗Learn about cause, effect and prevention
∗Recognise it, report it, manage it – effectively!

Distractions
Multi-Tasking OR Dangerously Distracted?
∗It happens very easily
∗Personal as well as job distractions
∗Use checklists
∗If distracted – go back 2 steps
∗Be assertive – insist on calling back when convenient

Pressure
Just Busy OR Dangerously Overloaded?
∗Good pressure can improve performance
∗Too much leads to stress – always bad
∗Don't let pressure lead to taking short cuts
∗Ensure adequate resources – people, time, tools

Capability
Is Your Team REALLY Capable?
∗Check training and qualifications and experience
∗Regularly assess capability
∗Provide on-board training, mentoring, coaching
∗Ensure any capability gap is addressed

Local Practices
Efficiency OR Dangerous Shortcut?
∗Don't cut corners
∗Follow procedures – they are there for a reason!
∗Beware local norms becoming the "new standard"
∗Poor or inadequate procedures? – report them
∗Efficient or not thorough enough?

Teamwork
How Well Do You REALLY Work Together?
∗Ensure shared mental model
∗Beware "group think"
∗Encourage challenge
∗You can be in more than one team at a time