

# Reducing harm from high-risk medicines



## Webinar 3: Preventing error and harm

- Make sure you have your pc and phone connected (see instructions emailed to you)
- You will be muted during the webinar to reduce background noise
- This webinar will be recorded
- Use the public chat or Q&A tab to post a question during the webinar





# Reducing harm from high-risk medicines

## Webinar 3: Preventing error and harm

Chair: Gillian Bohm

Panel: Sandy Blake, Karen O'Keefe  
and Beth Loe



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National  
Patient  
Safety  
Campaign

# Introduction

- Campaign topic has focused on:
  - Identify error and harm
  - Mitigate error and harm
  - Partner with patients and whanau
- Now focusing on preventing error and harm specifically:
  - Learning from incidents
  - Considering human factors
  - Implementing system changes



# Outline of webinar

- Panel will present on
  - Learning from incidents
  - Human factors
  - Systems change
- Discussion on two medication-related cases
  - Panel discussion
  - Opportunity for questions from the audience



# Learning from events

Critical information when reporting an event/near miss

- Demographic and medication information
- What actually happened in detail
- Why it might have happened – contributory factors
- What do you see preventing it happening again



# Learning from event review?

What changes are needed to prevent the same event /near miss

Recommendations:

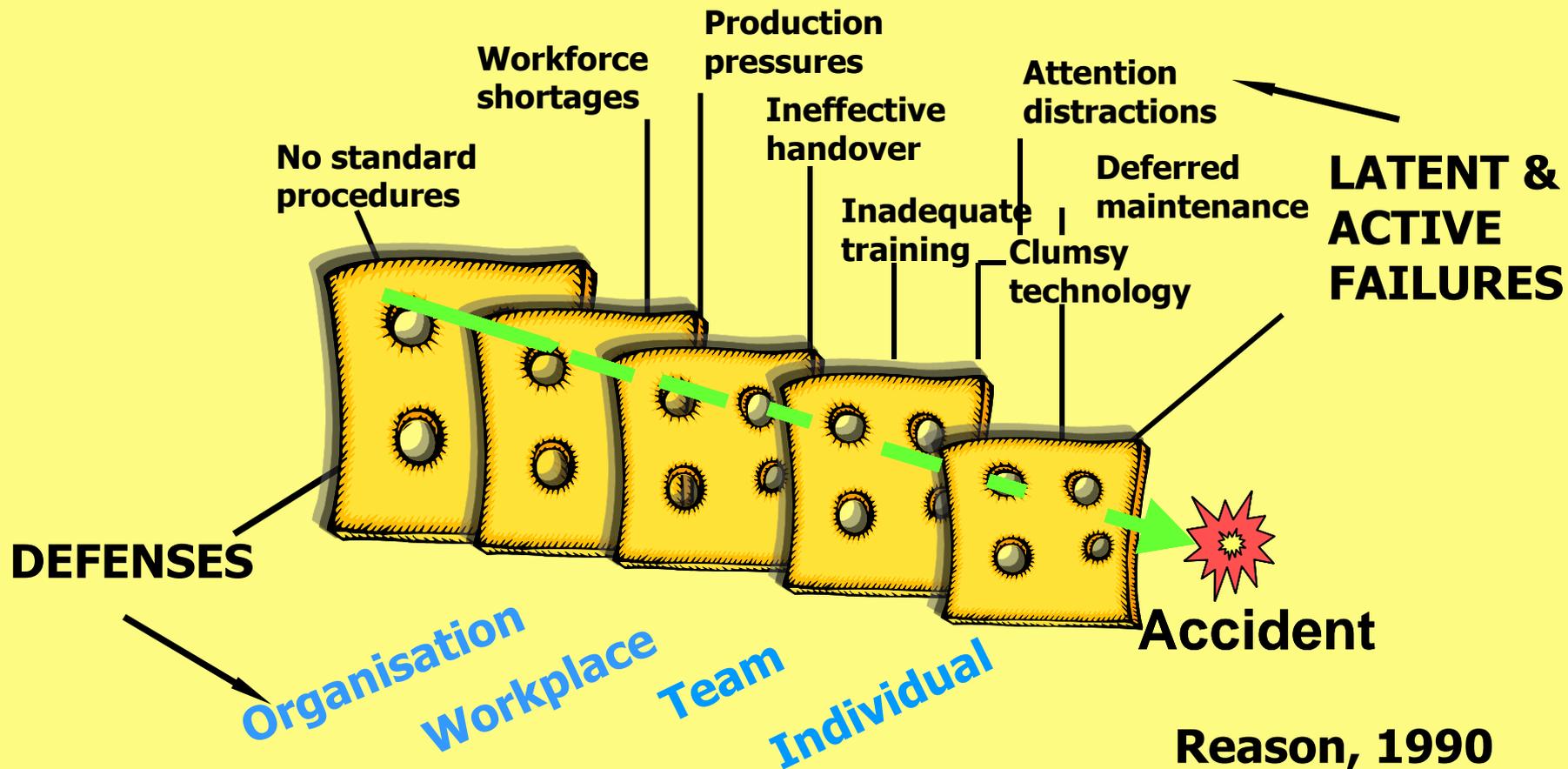
- Need to be doable
- Include long term goals and immediate actions
- Try for a mix of low, medium and high leverage actions.



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Human factors refer to environmental, organisational and job factors and individual characteristics that influence behaviour at work and may have an effect on health and safety



# Factor groupings



- **Patient factors**  
(What is there about this individual patient that increased the likelihood an error could occur?)
- **Task factors**  
(Were the tasks completed as per medication procedures/ policies?)
- **Care environment /workplace factors**  
(Was the failure of a barrier that may have protected the patient a possible factor?)
- **Staff factors**  
(Were staff numbers/skill mix or training a possible factor in this event?)
- **Communication factors**  
(Was lack of or misinterpretation of communication a factor in this event?)
- **Teamwork factors**  
(Did the team work together in a way that might have prevented this event?)
- **Organisational factors**  
(Did the culture/resource/policies of the organisation influence this event?)



# Case 1: Methadone

- Adult patient admitted on and prescribed methadone 30mg twice a day
- Patient was in the process of being transferred to theatre and time was short
- Clinician administering the medicine was experienced, checker confirmed the dose without really looking
- Methadone liquid available in the Controlled Drug cupboard on the ward is 5mg/mL
- Patient is given a dose of 30mL methadone
- Patient required naloxone dose



# Case 1 discussion

- What were some of the human factors within this case?
- What other factors not obvious could be considered?
- How does understanding the human factors help us prevent a similar case happening again?



# What we know about making errors

- All of us make errors
- Errors are not made on purpose
- No one wants to admit errors if they know punishment is the result
- Error ≠ bad behavior
- Errors happen for a reason



Lucian Leape, MD



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# We look but often don't see

- According to a research at Cambridge University, it doesn't matter in what order the letters in a word are, the only important thing is that the first and last letter be at the right place. The rest can be a total mess and you can still read it without problem. This is because the human mind does not read every letter by itself, but the word as a whole.

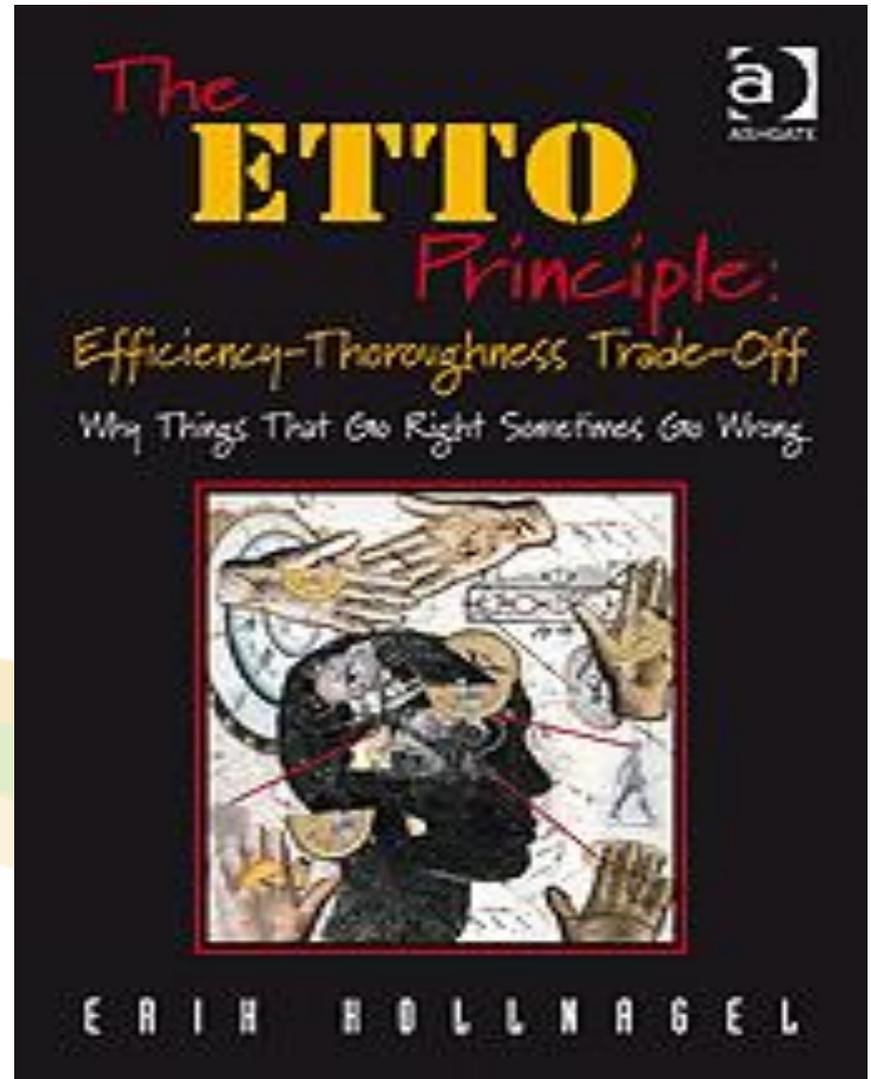


# Our medication systems are complex

- Important to focus on harm reduction.
- Improve the understanding of the human condition –
- Need to target multiple points in the process to improve safety
- Resilience engineering



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# Safety 2 thinking

“It is the dilemma of Safety Management and Risk Assessment that we inadvertently create the Problems of the Future by trying to solve the Challenges of the Present with the Mind-set (models, theories & methods) of the Past.”

Erik Hollnagel 2011



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# Case 2: Heparin open book



- Patient prescribed 3, 000 units of heparin intravenously in an operating theatre
- Clinician administering was more familiar with 1mL ampoules of heparin (containing 5, 000 units)
- Only ampoules available were 5mL (containing 25, 000 units)
- Clinician misread label on the ampoule to be 2, 500 units in 5mL
- Administered 6mL (30, 000 units)
- Patient had excess bleeding and was administered reversal agent with no further harm



## Case 2 discussion

- What were some of the system failures within this case?
- What other factors not obvious could be considered?
- What error-prevention strategies could be used?
- How does implementing system changes help us prevent a similar case happening again?



# Summary

We've looked at ways to prevent error and harm through:

- Learning from incidents
- Considering human factors
- Implementing system changes



# Links to other sources

- Implementing human factors in healthcare, Patient Safety First, 2010 accessed at <http://www.patientsafetyfirst.nhs.uk/ashx/Asset.ashx?path=/Intervention-support/Human+Factors+How-to+Guide+v1.2.pdf>
- American Pharmacists Association. Leveraging error reduction strategies. ISMP error alert. 2013 Aug 01. URL: [www.pharmacist.com/leveraging-error-reduction-strategies](http://www.pharmacist.com/leveraging-error-reduction-strategies)
- <http://www.hqsc.govt.nz/our-programmes/reportable-events/open-book/>



## Next webinar

- 24 March 8-9am
- Dr Alan Davis and Catherine Gerard will discuss the recently released opioids atlas of variation

