NHS
Blood and Transplant

The Human Factors Perspective

The weakest link ?

Catherine Smith Head of HS&W Projects

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The Human Mind is Faulty

Errors in perception

The only person who has never made a mistake are the ones who have never done anything!

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90% of all accidents are caused by human failure

true … BUT

99% of human failure is caused by the prevailing conditions

Are the circles light or dark ?

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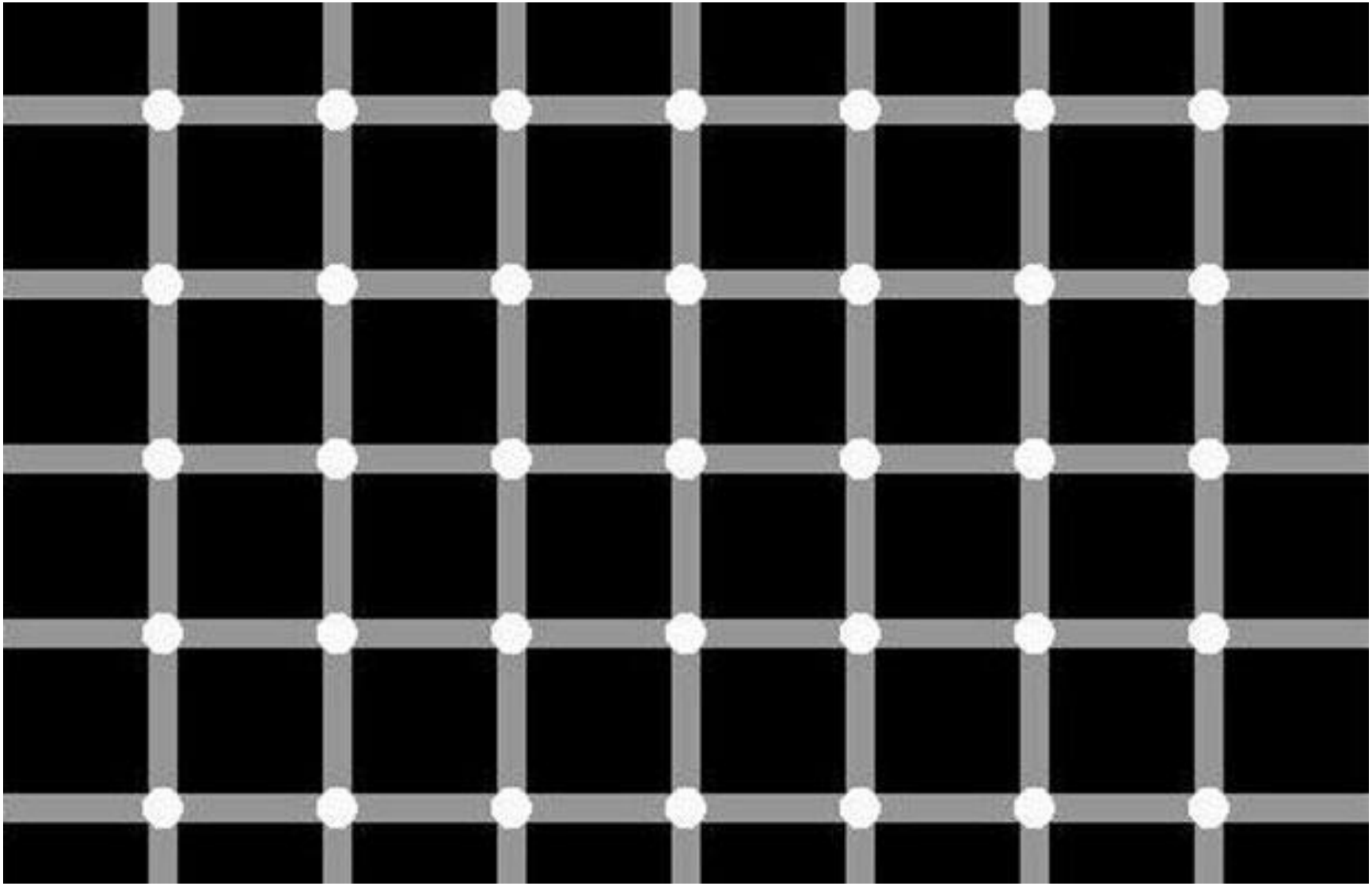

1956 – GEORGE A. MILLER

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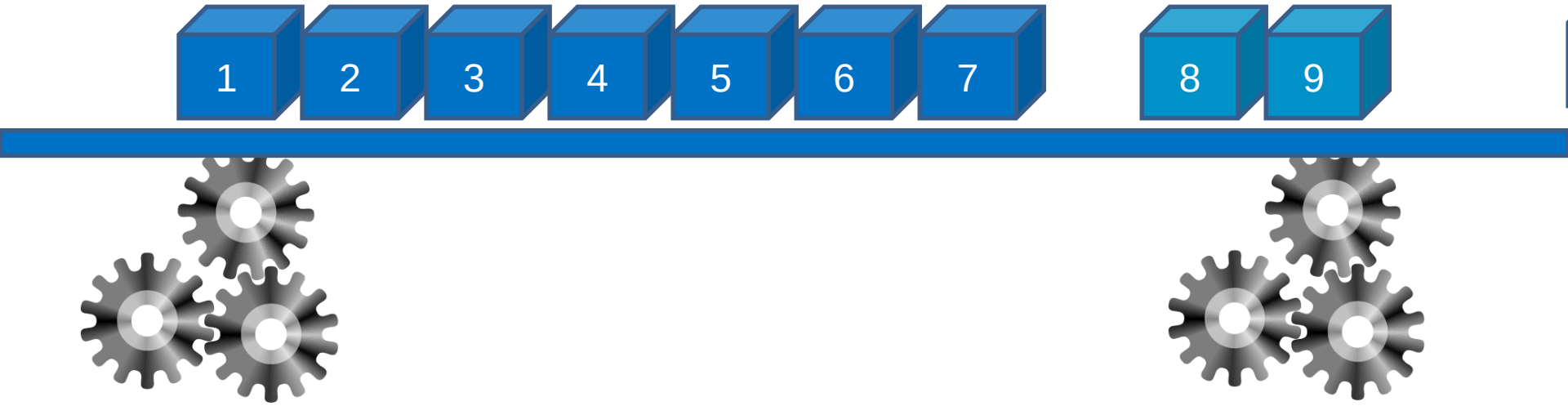
7 ± 2

‘The Magic Number’

We are human, not machines.

We can only deal with so much information at once.



Are the lines parallel ?

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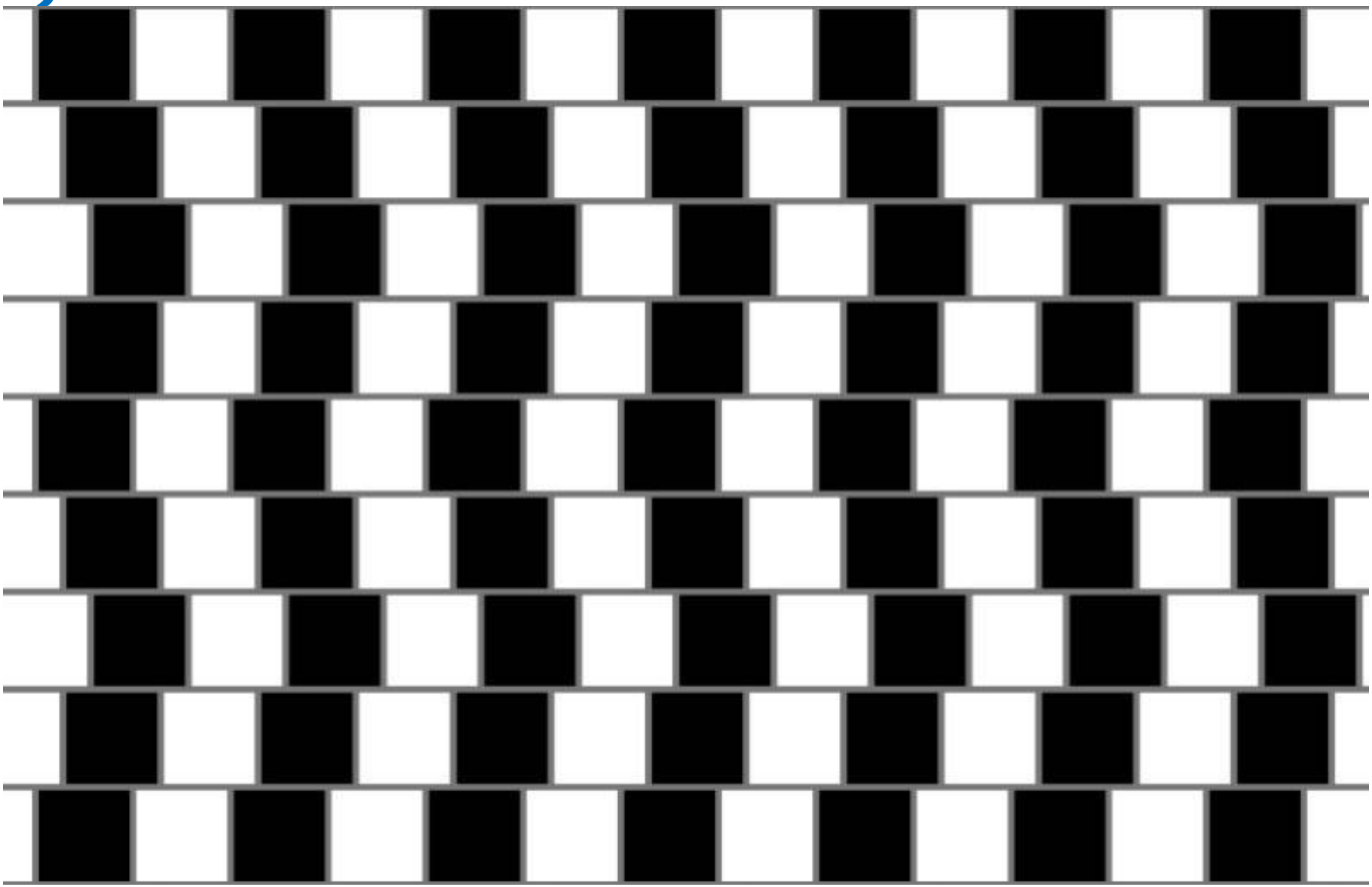

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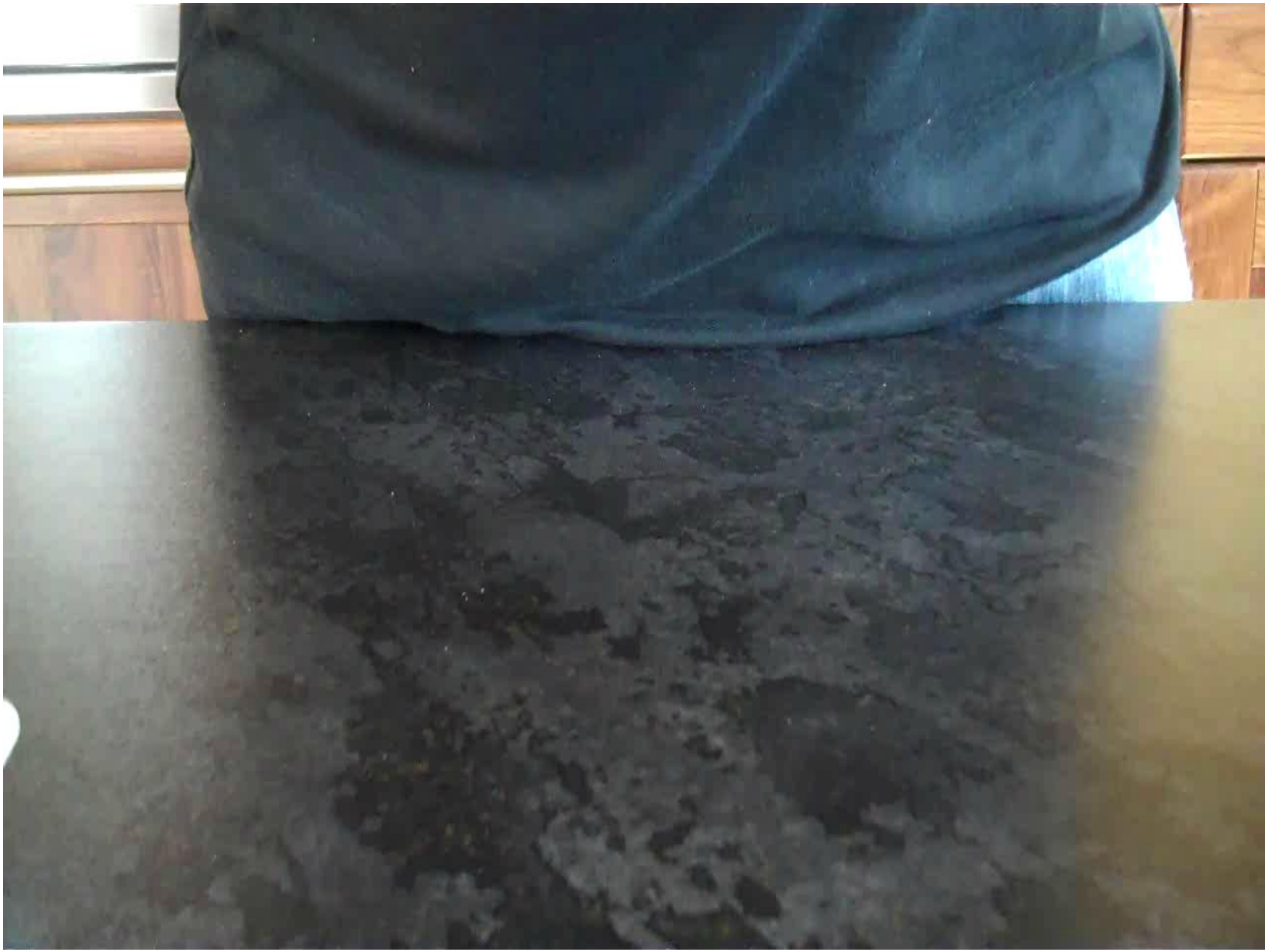
Are you alert ?

How many red cards are dealt in the following video clip….



What do you see ?

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Two lovers kissing

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Interactions & Influences

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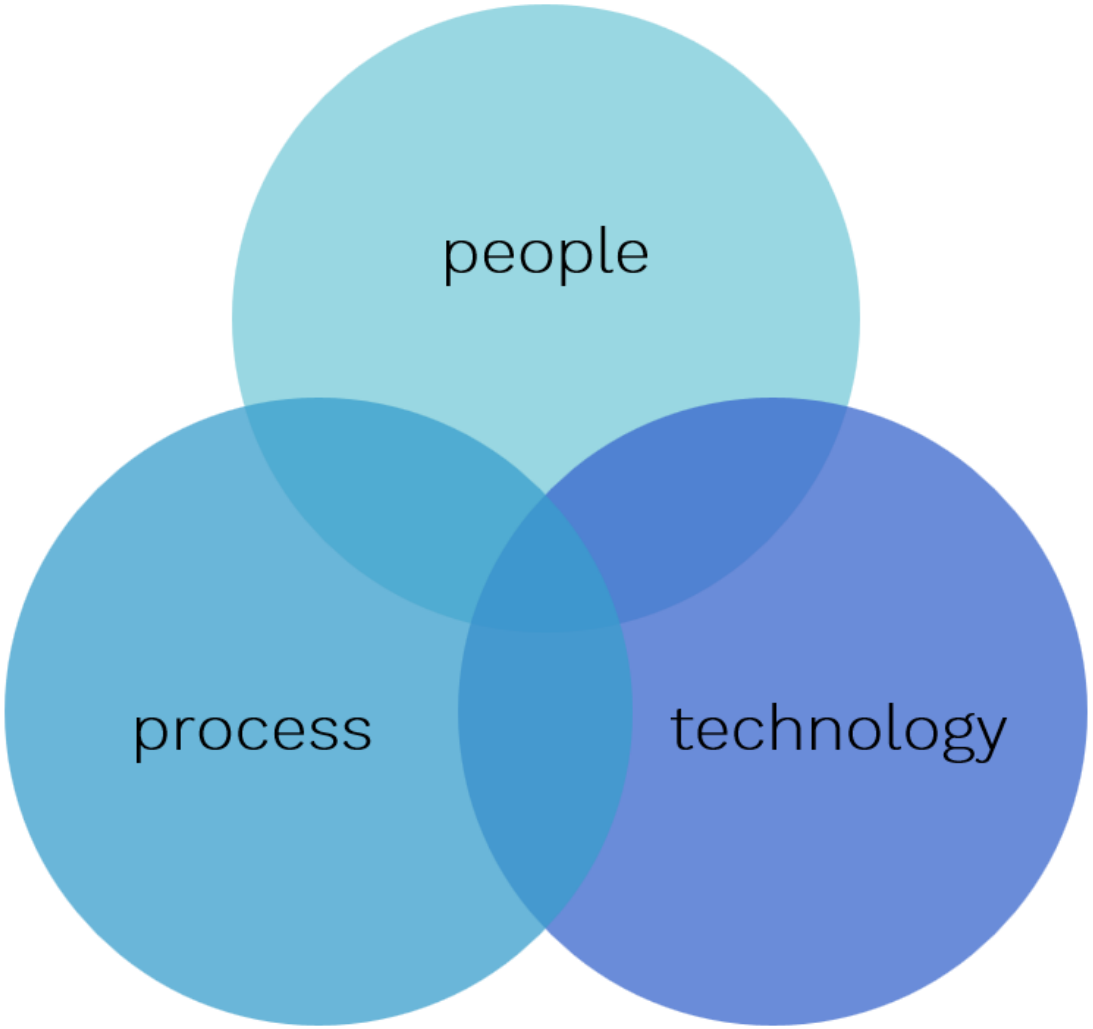

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Case Study SHOT 2017 report

Scenario

Patient was transfused platelets and red cells in separate incidents with only one group on record in the laboratory information management system (LIMS).

Individual culpability identified as root cause

“Total culpability attributed to individuals may fail to highlight system problems”

Following were also factors:

- Workload issues
- Lone working
- Nightworking
- Assumed test done earlier
- Layout of information - comment highlighting test had not been done was at bottom of the report

Corrective and Preventative Action
Update the SOP and add flag to LIMS

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National Quality Board

Scenario

Two patients with same name set up with one hospital number and set of medical notes. They had different medical conditions requiring appointments in different departments. Both had knee pain. Wrong patient arrives and had the procedure (knee operation) intended for the other.

Learning

4 different hospital numbers on medical records, more than one GP and several addresses
Patient identifier labels replicated many times
No independent translator
Consent and pre-op assessment form not completed properly

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Accident

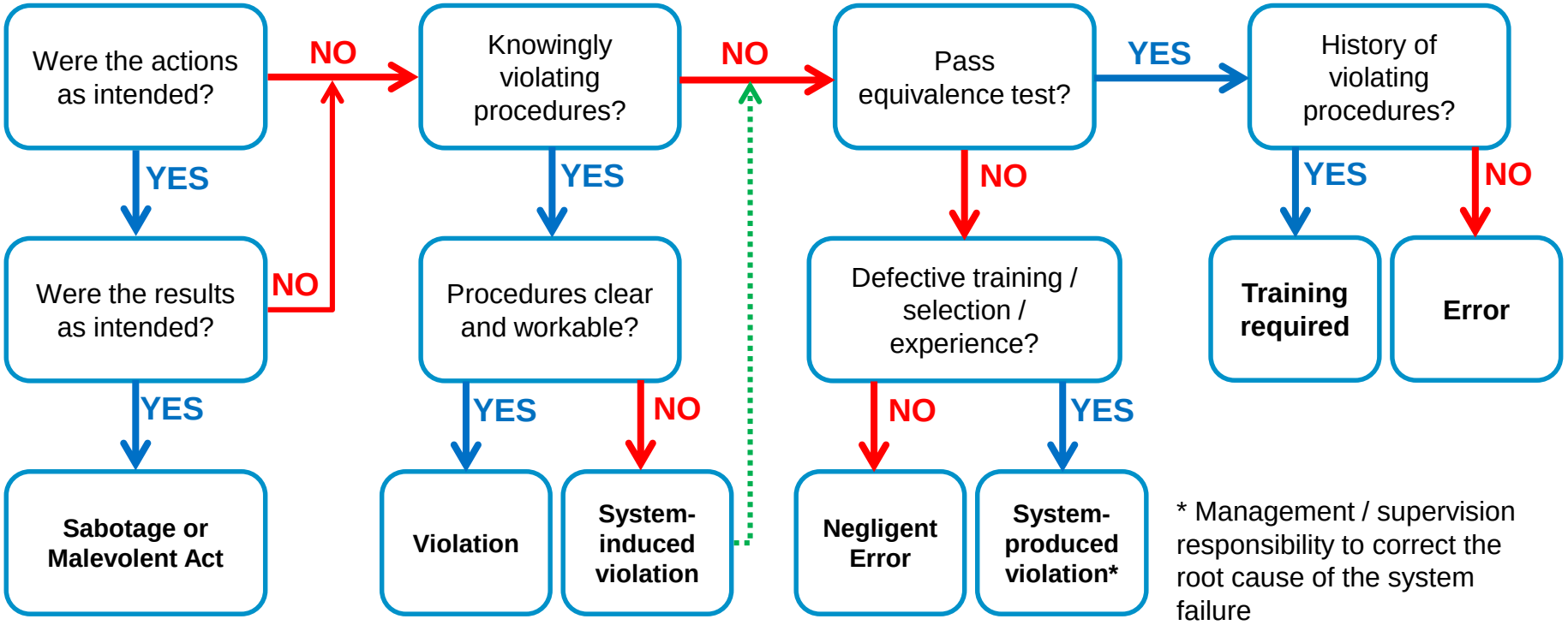
Scenario

Back injury sustained whilst loading equipment cages onto lorry at the end of a blood collection session.

Learning

Fatigue and tiredness
Environment - lighting and uneven ground
Faulty brakes – maintenance of equipment

Typical "Just Culture" Process



Coaching

Verbal Warning

First Warning

Final Warning

Dismissal

INDIVIDUAL CULPABILITY

Analysis of People Causes

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Was the action performed with your manager's knowledge?

NO

Was the action influenced by physical capability / condition ?

Was there a failure to carry out the actions of a task (actions not as planned) ?

Did the individual believe they were acting in an appropriate manner?

Was the action believed to be in conformance with existing rules or procedures?

YES

Restart the process with the line manager

YES

Identify the influencer from these:
Allergic reaction
Fatigue
Disability
Pre-existing medical condition
Poor general health
Mental state

YES

Slips and Lapses
"I didn't realise what had happened"

YES

Rule Based Mistake
"I didn't expect that to happen"

YES

Knowledge Based Mistake
"I was not aware of the rule; the rule was not clear or well-understood"

NB. "action" refers to action, event and / or behaviour
"influence" refers to its affect / have some bearing on the action

PHYSICAL CAPABILITY & ERRORS

VIOLATIONS

The rule is well-known but local custom / practice frequently ignore it

YES

Routine
"But everyone does it like that around here"

Is there a significant difficulty / abnormal risk impeding this action being done in accordance with established procedures?

YES

Exceptional
"It was actually safer to ignore the rule than to follow it"

Situational
"I can't complete the task if I follow the rules, but did it anyway"

The individual believed an alternative action was for the good of the company

YES

Organisational Gain
"I thought it was better for the organisation to do it that way"

The individual chose an action that was for their own personal gain / benefit

YES

Personal Gain
"It was better / easier for me to do it that way"

Analysis of System Causes

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Was the action influenced by **process** requirements

YES

Identify the process influencer from the following:
Performance standards
Validation
Checks / monitoring

Did the **documents** available / in use influence the action that was taken ?

YES

Identify the document influencer from the following:
Design
Instructions
Lack of documents

Did **management** have some influence in the action ?

YES

Identify the specific management influencer from the following:
Implementation
Supervision / control
Communication
Training
Risk Assessment

PROCESSES & CONTROL

NB. "action" refers to action, event and / or behaviour
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SUPPLIER, ENVIRONMENT & EQUIPMENT

Did the actions of the **Supplier / Contractors** influence the outcome ?

YES

Identify the specific influencer from the following:
Lack of pre-qualification
Inadequate pre-qualification
Contractor oversight
Damaged materials
Materials not properly identified

Was the action influenced by the surrounding **environment** ? (building, area, place etc)

YES

Identify the environment influencer from the following:
Design / Layout
Condition / Maintenance
Temperature
Lighting
Ventilation
Noise
Surface
Weather Conditions

Was the action influenced by the **equipment** used ?

YES

Identify and review the equipment against best practice to identify if any of the following influenced it:
Design
Availability
Servicing
Failure

Could **people factors** play a role in this incident ?

YES

Use the tool **'Analysis of People Causes'** to identify these.

Other Considerations

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- NHS Improvement Just Culture Guide
- How committed are the top management (*really?)*
- How well are incidents investigated / followed up / **closed out**?
- Relationships across teams / directorates / sites
- Ownership
- Blowing the trumpet
- How to keep it fresh

What do you see?

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