

### 1. WHAT HAPPENED?

Describe the sequence of events in chronological order, focusing on factual information.

### 2. WHY DID IT HAPPEN?

Describe possible contributory factors. What elements were included? Was it, for example, a matter of communication, education and training, procedures and guidelines, working environment, equipment and devices, patient-related factors, control measures/barriers or management issues?

### 3. WHAT HAS BEEN LEARNED?

Describe the team's considerations in relation to learning. Consider, if necessary, the need for checklists, control measures and simplified/standardised working procedures, as well as the importance of teamwork and effective and clear communication.

### 4. WHAT NEEDS TO BE CHANGED?

Describe action plans and initiatives to prevent similar events. Specify who is responsible for following up on the action plan, and when it must be accomplished

# Event analysis

## THE SEVEN STEPS:

### BEFORE THE ANALYSIS MEETING

Step 1. Select events for analysis

Step 2. Collect information and describe the actual course of events

Step 3. Convene the meeting

### DURING THE ANALYSIS MEETING

Step 4. Set frameworks and rules for the analysis

Step 5. Conduct the actual analysis (the four questions)

### AFTER THE ANALYSIS MEETING

Step 6. Implement changes and follow up

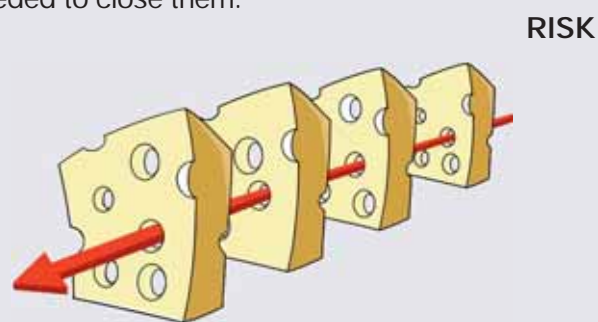
Step 7. Share learning experiences and events with others

# How to conduct an event analysis

## – checklist

### THE SWISS-CHEESE MODEL

The cheese slices represent safety systems or barriers designed to prevent patient safety events. If the holes in the slices line up, there is a chance that harm will be inflicted. The event analysis identifies the holes and determines the actions needed to close them.



James Reason's Swiss Cheese Model  
(Br Med J 2000;320:768-70)

HARM

### CLASSIFICATION OF PATIENT HARM

#### NO HARM

#### MILD

Minor, temporary problem, not requiring additional care or treatment

#### MODERATE

Temporary condition requiring hospitalisation, additional care, treatment by a GP, or additional treatment for patients already in hospital

#### SEVERE

Permanent harm requiring hospitalisation, treatment by a GP, additional care or treatment for patients already in hospital, or other problems that require acute, life-saving treatment

#### DEATH

According to Danish Patient Safety Database  
(Modified from WHO)

### THE ANALYSIS MEETING

#### DRAFT AGENDA

1. Introduction by the chair (agenda and ground rules)
2. Selection of minute-taker
3. Status of previous action plans
4. Selection of events to analyse
5. Analysis of one or more events
6. Achieve consensus on the conclusions and action plans

#### THE EVENT ANALYSIS (FOUR QUESTIONS)

1. What happened?
2. Why did it happen?
3. What has been learned?
4. What needs to be changed? (Action plan)

#### GROUND RULES FOR THE MEETING

- An open, non-judgemental atmosphere in which everyone has a say
- Focus on learning and prevention
- Appropriate use of language, including no blaming or pointing out personal faults or responsibility
- Agreement about what may be shared with others outside the team

### ACTION PLANS

#### A GOOD ACTION PLAN

- Tangible, realistic and possible to implement within a reasonable time frame
- Specific – who does what and when? (Responsibility and timetable)
- Evaluated in terms of whether it could potentially trigger new risks

#### TESTING THE ACTION PLAN

Will this action remove or reduce the risk of the event recurring?

### FROM AN INDIVIDUAL TO A SYSTEM PERSPECTIVE



### HOW STRONG IS THE ACTION PLAN?

#### VERY STRONG

- Setting up safeguards and barriers
- Fewer working steps
- Standardising equipment
- Massive management focus
- Profound change of safety culture
- Reduce dependence on human memory

#### STRONG

- Checklists
- Safe design of equipment and packaging
- Safe verbal communication, e.g. ISBAR
- Fewer interruptions and disturbances
- Computerized medical records

#### LESS STRONG

- Cautions and warnings
- More training
- Enhanced vigilance
- New guidelines

Adapted from VA Center for Patient Safety, USA