

#### Speakers



Energy Kristina Hansen MilCor Consulting



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GMP Certification Programme Certified Quality Assurance Manager

# Root Cause Analysis

A CAPA Workshop on Successful Failure Investigation

# 28/29 October 2025 | Hamburg Germany



# Highlights

- Regulations and Background
- Human Error
- Tools presented:
  - 5 Whys
  - Ishikawa (Fishbone)
  - Comparative Analyses
  - Bow-Tie Risk Management
  - Problem-Solving Analysis
  - A3 Methodology
  - 3B Method (Behavioural Root Cause Analysis Tool)
- RCA Completion and Documentation

# Objectives

During this course, you will get to know the principles and discuss all relevant aspects to perform **failure investigations to get to the true Root Cause of a problem**. This is the key for efficient Event Management and CAPA Systems.

# Background

Things will go wrong from time to time. In the world of pharmaceuticals, we need to ensure that we have robust processes and procedures in place to deal with such situations. When an unplanned event arises, it must be handled accordingly.

EudraLex Vol. 4, EU-GMP Guidelines,

Chapter 1 (Pharmaceutical Quality System): 1.4 (xiv): "An appropriate level of root cause analysis should be applied during the investigation of deviations, suspected product defects and other problems."

In any case a **sound failure investigation** is the key to identify appropriate actions and CAPAs. Here, understanding how to handle both human error- and non-human error-based non-conformances is crucial.

EudraLex Vol. 4, EU-GMP Guidelines,



1.8: [...] "The basic requirements of GMP are that: (vii) Any significant deviations are fully recorded, investigated with the objective of determining the root cause and appropriate corrective and preventive action implemented"

Root cause analysis (RCA) is a process that attempts to identify the exact cause of a problem, such as a deviation. Only by identifying the exact underlying fault it is possible to take the right action to solve the problem and prevent it from occurring again.

# **Target Audience**

This course is designed for all personnel involved in failure investigation/Root Cause Analysis concerning events, deviations and CAPA activities in their company. It is addressed to persons from Quality Assurance and Control, Manufacturing and R&D.

## 🕨 Testimonial

"Very good and interesting course. A lot of take-home messages. Especially the human behavior/human error insights." Sabine Evers, Ardena, The Netherlands

### Programme

#### Kick-off: When it's human

- Expectations on humans
- Why human error could not be a root cause
- Blame culture vs. root cause
- Error culture



Excerpt from FDA Warning Letter "...the investigation failed to establish a root cause and your quality unit failed to ensure the implementation of adequate corrective actions to prevent future recurrence."

#### Presentation and Workshop: Using 5 Whys und Ishikawa

- Short Introduction of the methods
- Strengths and weaknesses of each method
- Typical mistakes in application
- Workshop: Real life examples and experiences

#### Interactive Session: Comparative Analysis

- Identifying and documenting errors with worksheets
- The need for a systematic approach
- The key for success: comparison of occurred deviations with available facts

# Bow-Tie Risk Management and Problem Solving Analysis

- Controls, connection and causality
- Risk velocity

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- Preventive- detective and corrective controls
- The link to Fault Tree Analysis and Event Tree Analysis

#### Interactive Session: A3 Methodology

- What is a problem?
- The causes investigation; point of cause, direct cause and root cause
- The 8-steps, structure and methodology
- Deep Dive: Point of cause analysis
- Solving a murder case

#### Human Error Related Deviations

- The What
  - Top 10 Categories: FDA Warning letters (2021 2022)
  - The commonality
  - Undesirable behaviour...what is it?
- The How
  - The KAP model
  - Factor in the social element
- The Recurrence
  - Human error is NEVER a root cause
  - Blame it on the culture

#### Behavioural Root Cause Analysis (bRCA) for Human Error Related Deviations (HErD)

- Behavioural Root Cause Analysis tool (3B Method)
- Theory behind 3B method
  - Informative construct (brain)
  - Motivational construct (beating heart)
  - Perceived barriers construct (brick)
- Utilize the Solution
  - Sort the HErD 3B method
  - Practice in groups

#### **RCA** Completion

- How to document a Root Cause Analysis
- How to define the right actions based on the outcome

#### **Deviation Management and CAPA**

Principles and all relevant aspects to implement, improve and/ or work with a Deviation Management and CAPA System are topic of ECA's Deviation Management and CAPA training course. For more information see www.gmp-compliance.org/ or send an e-mail to w.schmitt@concept-heidelberg.de.

## Social Event



On 28 October, you are cordially invited to a social event (including dinner). This is an excellent opportunity to share your experiences with colleagues from other companies in a relaxed atmosphere.

### Speakers



Energy Kristina Hansen MilCor Consulting, Denmark Senior QA Specialist

Energy Kristina Hansen has over 25 years in experience in quality assurance and compliance, spanning across food, health, manufacturing, pharmaceutical, and government sectors and works with different industry leaders to help them find the true root cause to behavior related deviations. Energy Kristina is also Guest Lecturer at the University of Copenhagen.



Cecilie Hejlskov Syntese A/S, Denmark Operational Excellence Manager

Cecilie Hejlskov is Operational Excellence Manager at Syntese (a Ferring company). Before that she was Specialist in Global Operational Excellence at Xellia Pharmaceuticals. Cecilie also has a Lean Six Sigma Green Belt Certification.



Tim Ohlrich Gempex, Germany Principal Consultant & Manager

Tim Ohlrich is an engineer in biotechnology and has been working in the GMP-regulated environment for more than 15 years. Since his start in consulting he has executed and led several GMP-compliance projects, from ATMP start-ups to global market leaders.



Wolfgang Schmitt Concept Heidelberg, Germany Vice President

Wolfgang Schmitt is Vice President and organises and conducts courses and conferences on behalf of the ECA Academy in the areas QA and GMP. Before that, Wolfgang was Associate Director, QP and GMP-Auditor at Abbott.

This Training Course is recognized for the Quality Assurance Manager Certification Scheme



Building on your education, the ECA GMP/GDP certification programmes provide you with the appropriate supplement to acquire this qualification. This training course is the first element for your additional certification. Simply choose any three courses within the programme according to your professional interest. Your certificate is then valid for two years. To renew it, you can pick any training from the ECA courses and conferences list within that twoyears period – allowing you to broaden your knowledge in GMP and GDP compliance.

Please find more information at www.gmp-certification.org

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רוסווא סוו רווב וואווי ארבמצב זוון סתר וובו ב:	Root Cause Analysis   28/29 -	28/29 October 2025, Hamburg	
	Title, first name, surname		
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CONCEPT HEIDELBERG P.O. Box 101764 Fax +49 (0) 62 21/84 44 34	City ZIP 0	ZIP Code Country	
D-69007 Heidelberg	Phone / Fax		
GERMANY	E-Mail (Please fill in)		
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#### Date

Tuesday, 28 October 2025, 09.00 – 17.45 h (Registration and coffee 08.30 – 09.00 h) Wednesday, 29 October 2025, 08.30 - 15.30 h

#### Venue

2----

Barceló Hotel Hamburg Ferdinandstraße 15 20095 Hamburg, Germany +49 (0) 40/22 63 62 0 Phone hamburg.res@barcelo.com Email

#### Fees (per delegate, plus VAT)

ECA Members EUR 1,890 APIC Members EUR 1,990 Non-ECA Members EUR 2,090

EU GMP Inspectorates EUR 1,045

The conference fee is payable in advance after receipt of invoice and includes dinner on the first day, lunch on both days and all refreshments. VAT is reclaimable.

#### Accommodation

CONCEPT HEIDELBERG has reserved a limited number of rooms in the conference hotel. You will receive a room reservation form/POG when you have registered for the course. Reservation should be made directly with the hotel. Early reservation is recommended.

#### Registration

Via the attached reservation form, by e-mail or by fax - or search and register directly at www.gmp-compliance.org under the number 21877.

#### Presentations/Certificate

The presentations for this event will be available for you to download and print before and after the event. Please note that no printed materials will be handed out on site and that there will not be any opportunity to print the presentations on site. After the event, you will automatically receive your certificate of participation.

#### Conference language

The official conference language will be English.

#### Organisation and Contact

ECA has entrusted Concept Heidelberg with the organisation of this event. CONCEPT HEIDELBERG P.O. Box 10 17 64 D-69007 Heidelberg Phone: +49(0) 62 21/84 44-0 Fax: +49(0) 62 21/84 44 34 E-Mail: info@concept-heidelberg.de www.concept-heidelberg.com

For questions regarding content: Mr Wolfgang Schmitt (Operations Director) at +49(0)62 21/84 44 39, or per e-mail at w.schmitt@concept-heidelberg.de

For questions regarding organisation etc. please contact: Ms Isabell Helm (Organisation Manager) at +49(0)62 21/84 44 49, or per e-mail at helm@concept-heidelberg.de