

### Speakers



Peter Kralinger Carrymed Pharma & Transport, Austria



Kane Edgeworth Biomap, UK

# Temperature-Sensitive Pharmaceuticals – Transport and Vehicle Qualification



Live Online Training on 09 October 2025, 09:00 – 12:30 h



# Highlights

- Temperature-Controlled Transports of Medicinal Products
- Vehicle Qualification
- Regulatory Landscape
- **Packaging Systems**
- Vehicle Mapping Case Study
- Two Questions and Answers Sessions

Strategies to meet Regulatory Expectations

## Objectives

This Live Online Training aims to give participants a comprehensive yet compact overview of expectations concerning the transportation of products requiring special conditions. The focus will be on the requirements for the transport of **temperature-sensitive products**.

General aspects of road transport and air freight at cold chain conditions will be discussed. Furthermore, vehicle qualification and the effective mapping of vehicles will be covered. Q&A sessions will follow both lectures. Thus, take advantage of this opportunity to ask your questions.

# Background

It is of key importance that medicinal products are not only made to a high quality in accordance with **Good Manufacturing Practice** (GMP), but that the quality and integrity of these products are maintained through the entire supply chain to the patient. This is where **Good Distribution Practice** (GDP) comes into play.

The distribution of temperature-sensitive pharmaceuticals is extremely challenging. The EU GDP-Guidelines (Guidelines of 5 November 2013 on Good Distribution Practice of medicinal products for human use) require that if temperature-controlled vehicles are used, the temperature monitoring equipment used during transport should be maintained and calibrated at regular intervals. Temperature mapping under representative conditions should be carried out, taking into account seasonal variations. For temperature-sensitive products, qualified equipment (e.g. thermal packaging, temperature-controlled containers or temperature controlled vehicles) should be used to ensure correct transport conditions.

The approvals of various **COVID-19 vaccines** in many countries at the beginning of 2021 illustrated the importance of distribution of temperature-sensitive medicinal products – and the challenges involved. For example, how must these vaccines – but also **any other temperature-sensitive product** in general – be transported to get safely from the production sites to the storage and distribution centres and then on to the local vaccination centres?

The specific packaging, transport, handling and storage requirements as well as the transport routes may differ depending on the type of pharmaceutical product. In any case, transport companies must take special safety precautions for the transport of temperature-sensitive pharmaceuticals. The products are often not only very valuable, but also particularly sensitive. Damages can quickly lead to a total loss, as in case of doubt, the entire load must be destroyed. In addition, there are risks such as interruption of the cold chain. Therefore, the products may only be distributed with controlled packaging solutions and in special vehicles that are appropriately qualified and whose temperature is monitored permanently.

# Target Audience

This Live Online Training was developed for managers, executives, Responsible Persons (RPs), technical staff and other employees from companies involved in the distribution and supply of temperature-sensitive pharmaceutical products.

It will be of interest in particular for personnel from the following departments:

- Quality Assurance
- Validation
- Engineering
- Logistics
- Cold Chain
- Regulatory Compliance

#### Moderator

Dr Markus Funk

## Programme

Welcome and Introduction

(Dr Markus Funk)



Guidelines of 5 November 2013 on Good Distribution Practice of medicinal products for human use (2013/C 343/01)

#### Chapter 2.4. (Training)

[...] Personnel dealing with any products which require more stringent handling conditions should receive specific training. Examples of such products include [...] temperature-sensitive products.

A record of all training should be kept, and the effectiveness of training should be periodically assessed and documented.

# Temperature-Controlled Transports of Medicinal Products

#### (Peter Kralinger)

- Transport process design approach
- Optimization: insulation, freight cost, risk reduction
- Systems
  - Passive cooling
  - Thermohood
  - Containers for wide body aircrafts
- Process risk assessment
- Content of a quality agreement
- Dataloggers

#### Vehicle Qualification

#### (Kane Edgeworth)

- Regulatory landscape
- Oualification & validation
  - Definitions
  - Matrix approach
  - Project planning & design
  - IQ/OQ/PQ
  - Calibration
- Vehicle mapping case study



# **2** Questions and Answers Sessions

(Peter Kralinger and Kane Edgeworth)

Participants are invited to ask questions



Guidelines of 5 November 2013 on Good Distribution Practice of medicinal products for human use (2013/C 343/01)

#### Chapter 9.4. (Products requiring special conditions)

In relation to deliveries containing medicinal products requiring special conditions such as narcotics or psychotropic substances, the wholesale distributor should maintain a safe and secure supply chain for these products in accordance with requirements laid down by the Member States concerned. There should be additional control systems in place for delivery of these products. There should be a protocol to address the occurrence of any theft.

[...]

For temperature-sensitive products, qualified equipment (e.g. thermal packaging, temperature-controlled containers or temperature-controlled vehicles) should be used to ensure correct transport conditions are maintained between the manufacturer, wholesale distributor and customer.

If temperature-controlled vehicles are used, the temperature monitoring equipment used during transport should be maintained and calibrated at regular intervals. Temperature mapping under representative conditions should be carried out and should take into account seasonal variations.

If requested, customers should be provided with information to demonstrate that products have complied with the temperature storage conditions.

The process for delivery of sensitive products and control of seasonal temperature variations should be described in a written procedure.



Peter Kralinger

Carrymed Pharma & Transport GmbH, Austria Peter Kralinger is Managing Director of Carrymed, the first licensed pharma company providing inter-

national transport of temperature-sensitive pharmaceuticals. Before that he was in charge of the global transportation activities for all manufacturing sites in Europe of a large manufacturer of the pharmaceutical industry.



Kane Edgeworth Biomap Ltd, UK

Kane Edgeworth is Director at Biomap, providing validation & temperature monitoring solutions for the

Life Sciences industry. Before that, he was UK Operations Director at one of the world's largest data logger manufacturers.

# Agenda

09:00 - 09:15 h Welcome and Introduction

09:15 – 10:15 h **Presentation 1** 

10:15 – 10:30 h Questions and Answers Session 1

10:30 - 10:45 h Break

10:45 - 11:45 h **Presentation 2** 

11:45 - 12:00 h Break

12:00 – 12:30 h Questions and Answers Session 2





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Temperature-Sensitive Pharmaceuticals – Transport and Vehicle Qualification

Live Online Training on 09 October 2025, 09:00 – 12:30 h

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### Date of the Live Online Training

Thursday, 09 October 2025 from 09:00 - 12:30 h All times mentioned are CEST.

#### Technical Requirements

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### Fees (per delegate, plus VAT)

ECA Members € 490 European GDP Association Members € 490 APIC Members € 540 Non-ECA Members € 590 EU GMP Inspectorates € 490 The fee is payable in advance after receipt of invoice.

#### 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 22024.

#### Presentations/Certificate

The presentations will be made available to you prior to the Live Online Training as PDF files. After the event, you will automatically receive your certificate of participation.

#### Conference language

The official conference language will be English.

#### You cannot attend the Live Event?

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www.gmp-compliance.org/recordings.

#### 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 info@concept-heidelberg.de www.concept-heidelberg.com

#### For questions regarding content please contact:

Dr Markus Funk (Director Operations) at +49(0) 62 21 / 84 44 40, or per e-mail at funk@concept-heidelberg.de

#### For questions regarding organisation please contact:

Mr Rouwen Schopka (Organisation Manager) at +49(0) 62 21 / 84 44 13, or per e-mail at schopka@concept-heidelberg.de