

WEINMANN Emergency Medical Technology GmbH + Co. KG  
 PO Box 57 01 53 • 22770 Hamburg • GERMANY

Hamburg, September 2024

## Important safety information:

### Field Safety Corrective Action on a medical device

**Subject:** FSCA MMT\_MMS2\_2024-10.01\_CO2wCPR

**Sender:**  
 WEINMANN Emergency Medical Technology GmbH + Co. KG

**Addressee:**  
 Users and operators as well as specialist dealers

**Medical devices concerned** (trade name and article no. of devices):

This FSCA concerns all WEINMANN MEDUMAT Transport and MEDUMAT Standard<sup>2</sup> ventilators with CO<sub>2</sub> measurement. These are the following articles:

	MEDUMAT Standard <sup>2</sup> with CO <sub>2</sub> measurement	MEDUMAT Transport with CO <sub>2</sub> measurement
<b>Basic devices</b>	<b>WM 28710-02</b> MEDUMAT Standard <sup>2</sup> , ventilator, basic device with CO <sub>2</sub> measurement	<b>WM 28415</b> MEDUMAT Transport, ventilator, basic device with CO <sub>2</sub> measurement
	<b>WM 28710-04</b> MEDUMAT Standard <sup>2</sup> , ventilator, basic device with CO <sub>2</sub> measurement and compressed gas connection on the rear	

<b>Sales variants</b>	<b>WM 29500</b> MEDUMAT Standard <sup>2</sup> , ventilator with CO <sub>2</sub> measurement	<b>WM 28400</b> MEDUMAT Transport, ventilator with CO <sub>2</sub> measurement
	<b>WM 29550</b> MEDUMAT Standard <sup>2</sup> , ventilator with CO <sub>2</sub> measurement and compressed gas connection on the rear	
<b>Loan devices</b>	<b>WM 28950</b> MEDUMAT Standard <sup>2</sup> loan device with CO <sub>2</sub> measurement	<b>WM 28615</b> MEDUMAT Transport loan device, ventilator with CO <sub>2</sub> measurement
	<b>WM 28944</b> MEDUMAT Standard <sup>2</sup> loan device with CO <sub>2</sub> measurement and compressed gas connection on the rear	

Dear Sir or Madam,

Quality and safety are our top priorities, which is why we want to act consistently and transparently as usual and kindly request that you implement this Field Safety Corrective Action as part of your duty to cooperate in accordance with medical device legislation, so that users can continue to use our products safely on patients.

**1. Description of problem and cause:**

Chest compressions can lead to high-frequency air movements (typically 100–120/min) at the patient connection opening of the ventilation hose, which is where the gas sample for the etCO<sub>2</sub> measurement is taken. The air movements can be detected by the devices as “pseudo breaths” and may affect the accuracy of the etCO<sub>2</sub> measurement due to their high frequency. This could result in the etCO<sub>2</sub> measurement being erroneously displayed as too low and implausible alarms possibly being triggered.

This issue associated with etCO<sub>2</sub> measurement using the side-stream method is already known on the market. A selection of market observation and academic studies are provided here for your information:

- <https://www.sciencedirect.com/science/article/abs/pii/S0300957220302094>
- <https://www.capnoacademy.com/2018/10/03/rogue-capno-waves-resuscitation-team-notes-unusual-waveform-during-cpr/>
- <https://www.intechopen.com/chapters/65689>
- [https://www.researchgate.net/publication/295373123\\_High\\_Incidence\\_of\\_Chest\\_Compression\\_Oscillations\\_Associated\\_With\\_Capnography\\_During\\_Out-of-Hospital\\_Cardiopulmonary\\_Resuscitation](https://www.researchgate.net/publication/295373123_High_Incidence_of_Chest_Compression_Oscillations_Associated_With_Capnography_During_Out-of-Hospital_Cardiopulmonary_Resuscitation)

Why is WEINMANN drawing attention to this issue if it is already known on the market?

The importance of CO<sub>2</sub> measurement in resuscitation has increased in recent years, with resuscitation efforts derived from the CO<sub>2</sub> measurement also increasing in importance as a result. In order to avoid potential harm to the patient, we view it as our duty to draw your attention as users of our devices specifically to this etCO<sub>2</sub> measurement issue.

**2. What is the risk for the patient?**

Erroneously low etCO<sub>2</sub> measurements can lead to incorrect decisions being taken when performing resuscitation accompanied by possible harm to the patient.

### 3. Action

Please observe the safety information that will be included in the instructions for use of the MEDUMAT Standard<sup>2</sup> and MEDUMAT Transport ventilators in the future:



#### **Delay in treatment due to abnormal CO<sub>2</sub> measurement during chest compressions!**

The device's CO<sub>2</sub> measurement function is **not** designed for the high frequencies (100/min to 120/min) encountered during chest compressions. Chest compression can be detected by the device as high-frequency breathing, which can result in the etCO<sub>2</sub> measurement being erroneously displayed as too low and trigger implausible alarms. This can confuse the user and delay treatment.

⇒ Do **not** rely on the etCO<sub>2</sub> measurement as the sole indication for stopping cardiopulmonary resuscitation!

Please note: The etCO<sub>2</sub> measurement and the CO<sub>2</sub> curve can still be used for:

- checking the tube position;
- identifying the return of spontaneous circulation (ROSC) by a sudden increase in the etCO<sub>2</sub> measurement.

The safety information can also be found in the "Supplement to the instructions for use". This "Supplement to the instructions for use" must be included with the instructions for use for the above-mentioned devices.

You can download the "Supplement to the instructions for use" here or order a free copy using the reply form.

[Link to "Supplement to the instructions for use" MEDUMAT Standard<sup>2</sup>](#)

[Link to "Supplement to the instructions for use" MEDUMAT Transport](#)

Link to reply form:

[FSCA MMT MMS2 2024-10.01 CO2wCPR | WEINMANN Emergency \(weinmann-emergency.com\)](#)

### 4. What measures should be taken by the addressee?

#### **Are you a specialist dealer?**

1. Please confirm receipt of this notice using the **reply form** supplied by **11/20/2024** at the latest.
2. Ensure that your customers employing the above-mentioned devices take note of this safety information and receive the supplement to the instructions for use.

If you have already resold or otherwise passed on the device:

3. Forward a copy of this notice and the supplement to the instructions for use to the relevant customers.
4. Ask your customers to confirm receipt of the notice.
5. Instruct your customers to implement the safety measures as described above.

**Are you a user or an operator?**

1. Please confirm receipt of this notice using the **reply form** supplied by **11/20/2024** at the latest.
2. Ensure that all users employing the above-mentioned devices take note of this safety information and receive the supplement to the instructions for use. To help you in this regard, we have compiled a template for a notice that can be posted in all ambulance stations to draw users' attention specifically to the issue.
3. Ensure that the "Supplement to the instructions for use" is included with all instructions for use.

Please implement these measures promptly.

This Field Safety Corrective Action is a compulsory measure. The responsible authority has been notified accordingly.

**Contact**

If you have any questions or require any assistance, please consult your local specialist dealer or contact us directly:

Phone: +49 40 88 18 96 – 0

E-mail: [customerservice@weinmann-emt.de](mailto:customerservice@weinmann-emt.de)

Best regards,

WEINMANN Emergency  
Medical Technology GmbH + Co. KG

André Schulte  
Managing Director

p.p. Dr. Florian Dietz  
PRRC  
Head of Global QRA

This document was issued electronically and is therefore valid without signatures.

**Attachments**

Form: "Reply regarding safety information"

Links:

Reply form:

[FSCA MMT\\_MMS2\\_2024-10.01\\_CO2wCPR | WEINMANN Emergency \(weinmann-emergency.com\)](#)

Supplements to the instructions for use:

[Link to "Supplement to the instructions for use" MEDUMAT Standard<sup>2</sup>](#)

[Link to "Supplement to the instructions for use" MEDUMAT Transport](#)

Please use the digital reply form at:

[FSCA MMT MMS2 2024-10.01 CO2wCPR | WEINMANN Emergency \(weinmann-emergency.com\)](https://www.weinmann-emergency.com)

or complete this reply form and return it to us by e-mail, fax, or mail to:

**E-mail: CustomerService@weinmann-emt.de**

**Fax: +49 40 88 18 96 - 481**

**WEINMANN Emergency Medical Technology GmbH + Co. KG**

After Sales Service

Frohbösestraße 12

22525 Hamburg, GERMANY

I hereby confirm receipt of this letter and that I have read, understood and will implement its contents. This letter has been brought to the attention of all users of the product and of other people in my organization who need to be informed.

If the products have been passed on to third parties (applies to specialist dealers, for example), a copy of this information has been passed on to them.

**Please complete in full in block capitals:**

Company/organization details:

**Customer no.:**

\_\_\_\_\_

**Company/organization + address:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I am no longer in possession of the medical device:

The new owner is (company + address)

\_\_\_\_\_

\_\_\_\_\_

We have disposed of the following medical devices (enter name of medical device incl. serial number):

\_\_\_\_\_

\_\_\_\_\_

Please send me \_\_\_ printed copies of the supplement to the MEDUMAT Transport instructions for use at the address specified above.

Please send me \_\_\_ printed copies of the supplement to the MEDUMAT Standard<sup>2</sup> instructions for use at the address specified above.

\_\_\_\_\_  
Date, signature

\_\_\_\_\_  
Name (in block letters)

\_\_\_\_\_  
Position (in block letters)

\_\_\_\_\_  
E-mail address (in block letters)