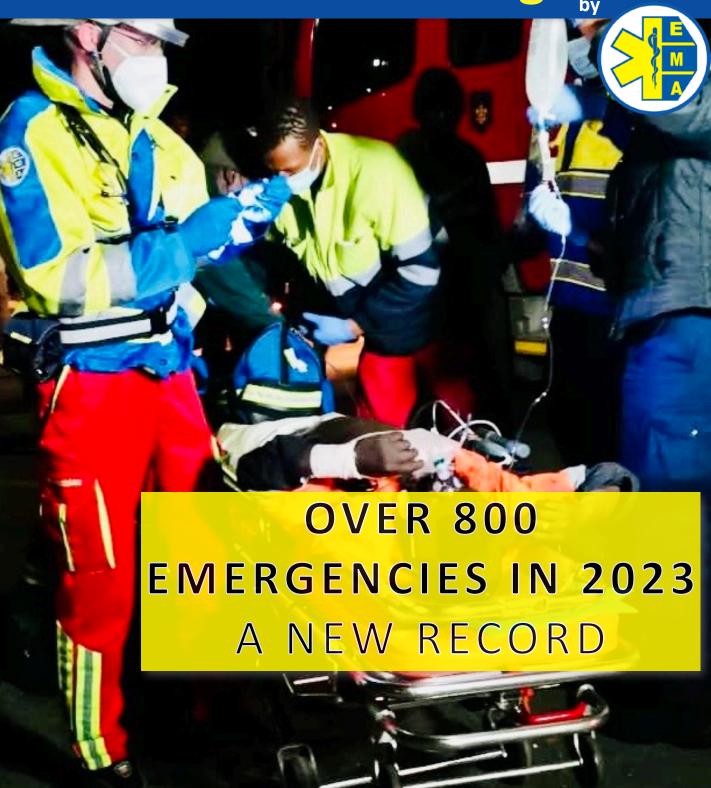
**OSHMed Health Magazine** 



Health Magazine for the Health of your Family and Employees,
Occupational Safety, Occupational Health, Emergency & Medical Care
and much more







## Over 800 Emergencies in 2023 - a new record

800 x Emergency Assistance in 2023. this commitment shows we were "There when you need us" for the community.

"There when you need us" is the slogan of the nonprofit organisation E.M.A.

This years number of emergencies exceeds the number of 2022 already. E.M.A. is a community service and the only nonprofit organisation for Emergency & Medical Care in Namibia. To fulfil our work, we depend on your support and donations towards our nonprofit organisation.

On a daily base our medical team of E.M.A. saves life's and make difficult rescues possible. See here a the short annual statistics:

\*start November 2019 in 2019 we had 124 emergencies in 2020 we had 539 emergencies in 2021 we had 646 emergencies in 2022 we had 740 emergencies

E.M.A. is "there when you need us". The team of E.M.A. and our emergency ambulance is on duty for you 24/7.

## E.M.A. **Emergency Call**

**Solution** dial 9112

Every day the organisation assists many patients in need of a Rescue Service, free of charge for those who don't have medical aid. E.M.A. provides high standard care for all their patients.

Your support is needed. Please support this unique Namibian Community Service If you would like to become a Supporting Member, please contact us:

Email: <a href="mailto:ema-organisation@osh-med.pro">ema-organisation@osh-med.pro</a>
Website: <a href="mailto:www.ema-organisation.pro">www.ema-organisation.pro</a>

Or you can do a direct donation to us. Account details:

Account Name: EMA-Organisation

**Bank Windhoek** 

Branch: Maerua Mall Branch Code: 483 872 Account No: 8015 827 019

Swift Code: BWLINANX

#### THANK YOU!

A special thanks goes to our gold & platinum corporate supporters, to make part of this service possible:

www.osh-med.pro www.westcarenam.com





Or online on www.osh-med.pro

## OSH-Med international

# First Aid Kit



10% on all FA kits in stock





Special valid from 06.09. to 12.09.2023

#### **First Aid Preparedness**

Having trained personnel ready and willing to render first aid will reassure other co-workers and make them feel safer themselves.

The Labour Act announced in 2007 is a good example of the kind of worker injury where a co-worker might have to respond quickly with first aid assistance. The proposed penalties against not following the OSH standards were proposed. Along with the penalties came.



The key standards for ensuring employees are ready and able to provide first aid care to an injured or sick co-worker are familiar ones. The Labour Act, 2007 sets standards for medical services and first aid, and addressing first aid kits and both first aid training and CPR training.

This MoHSS Appendix provides a list of topics for what is considered to be the "minimal acceptable first-aid and CPR training program" for employees engaged in logging, and it's a handy guide for other workplaces, as well. The appendix states that first aid and CPR training should be delivered in a variety of methods and should include practical exercises and

examinations (both written and practical), and the length of the training must be enough to ensure the trainees understand the concepts of first aid and can demonstrate their ability to perform the various procedures needed to help someone experiencing:

- Respiratory arrest
- Cardiac arrest
- HaemorrhageEmergency phone numbers should be posted prominently at the job site, as well.
- Lacerations/abrasions
- Amputations
- Musculoskeletal injuries
- Shock
- Eye injuries
- Burns
- Loss of consciousness
- Extreme temperature exposure (hypothermia/hyperthermia)
- Poisoning
- Loss of mental functioning (psychosis/ hallucinations, etc.).

It says the training should cover CPR; the application of dressings and slings; treatment of strains, sprains, and fractures; immobilisation of injured persons; handling and transporting injured persons; and the treatment of bites, stings, or contact with poisonous plants or animals.

Emergency phone numbers and First Aid Kit should be placed prominently at the job site, as well. More information on www.osh-med.pro





# 3 scenarios demonstrating the benefits of capnography

Waveform capnography provides a noninvasive, accurate assessment of a patient's ventilatory status. Research from the US

BENEFITS OF WAVEFORM CAPNOGRAPHY Waveform capnography is a non-invasive tool that provides a quantitative measure of expired CO2 throughout the respiratory cycle. A small end tidal carbon dioxide (ETCO2) sensor is placed at the patient's nose or mouth. During inhalation, the ETCO2 sensor reads a baseline CO2 partial pressure. During initial exhalation, the CO2 partial pressure rises sharply as CO2 rich gas arises from the alveoli. As exhalation continues, the CO2 partial pressure plateaus, and then returns to baseline upon inhalation. In a healthy patient, this physiological process produces the usual "table-shaped" waveform with plateau readings of 35-45 mmHg. Lower respiratory system and V/Q abnormalities cause deviations from the expected "table shape" that are easily recognisable and clinically useful.



Once trained in capnometry interpretation, ECPs would gain valuable information that other vital signs cannot quickly provide. Here are three quick scenarios demonstrating the potential benefits of waveform capnography during common ECP-level interventions.

Monitoring respirations. An unresponsive patient has been loaded onto the ambulance by ECPs. Prior to leaving the scene, normal pulse rate and adequate respiration rate and depth are confirmed. Pulse oximetry reads 92%, so the ECP manually opens the airway and places the patient on supplemental oxygen via nasal cannula. On route to the hospital, the ECP notices that the patient's SpO2 is slowly dropping. The ECP switches to a nonrebreather with an airway adjunct, and increases the amount of oxygen, but the SpO2 continues to drop. The ECP begins to count respirations, and finds the chest rise and fall very shallow. Upon auscultation, they are not sure if they can actually hear any lung sounds over the driving noise. The patient's heart rate begins to drop, and the ECP promptly begins positive pressure ventilations. If the ECP had access to end-tidal capnography, they would have noted the patient's drop in respiratory rate and depth almost immediately, minutes before the delayed notification from the pulse oximeter and falling heart rate.

### Monitoring positive pressure ventilation.

A patient is unresponsive due to heat stroke. Respirations are inadequate, so one ECP begins positive pressure ventilations while the other cools the patient. Although the ECP sees adequate chest rise and fall, the pulse oximeter reads "low." Unsure if they are ventilating the patient adequately, the ECP begins squeezing the BVM more forcefully and ventilating the patient at a faster rate,



inducing barotrauma and gastric inflation. If the ECP had access to end-tidal capnography, they would have known whether they were adequately ventilating the patient. Furthermore, they would have observed that ventilating the patient more forcefully was not improving alveolar gas exchange, reducing the likelihood of continued overventilation and patient injury.

Monitoring CPAP therapy. An elderly patient is experiencing difficulty breathing. Due to the patient's medical history, physical presentation, and vital signs, the ECP concludes the patient is experiencing a COPD exacerbation. The ECP administers an albuterol treatment and places the patient on CPAP. Throughout transport, the patient continues to experience respiratory distress, and their SpO2 slightly increases from baseline. If the ECP had access to end-tidal capnography, it may provide clues for the etiology of the patient's respiratory distress. Capnography could also reveal impending complications

such as cardiovascular collapse or pneumothorax. It can help monitor patient response to bronchodilator and noninvasive positive pressure ventilation treatment.

In these scenarios, lung auscultation and pulse oximetry provided the ECP with insufficient ventilatory information, leading to patient deterioration. However, proper utilisation of waveform capnography would have provided the ECP with the critical information needed to better monitor their patients. Waveform capnography provides a non-invasive, accurate assessment of a patient's ventilatory status. While the technology is already extensively utilized by ALS prehospital providers, in many rural parts of the United States, an ECP may be the highest level of prehospital care that a patient receives. Why should waveform capnography be limited to ALS providers? Considering its numerous benefits, should we include waveform capnography in the ECP scope of practice?

#### **OVERVIEW**

- Capnography measures ventilation through exhaled CO<sub>2</sub> (P<sub>E</sub>CO<sub>2</sub>)
- Abnormal morphology can provide important data regarding pulmonary pathophysiology

#### **CLINICAL APPLICATIONS**

- Confirmation of endotracheal intubation
- Monitoring airway integrity
- Monitoring cardiac output
- Monitoring spontaneous respiration
- Assessing for CO<sub>2</sub> retention
- Assessing ROSC during CPR by observing a sudden increase in waveform amplitude

# α-Angle Between II and III >90° = bronchospasm of

PHASE I

Inspiratory baseline

 $P_ECO_2 = zero$ 

 >90° = bronchospasm or V/Q mismatch

## Inspiration I

#### PHASE II

Beginning of expiration
 Transition as CO<sub>2</sub> rises

Ш

when anatomical dead space, then alveolar gas, is exhaled

#### PHASE III

Ш

Expiration

- Alveolar plateau
  - Peak CO<sub>2</sub> at end of
  - phase III

    Correlates with PaCO<sub>2</sub>

IV/0

**B-Angle** 

Between III and IV/0

>90° = rebreathing or

mechanical obstruction

#### PHASE IV/0

Baseline

- Start of inspiration
   P<sub>E</sub>CO<sub>2</sub> rapidly falls to
- zero





CC/2016/09040

## Advanced care specialists

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Telephone: +264 61 238 203/Fax: +264 61 254 203

Mail: admin@westcarenam.com / admin@wfcmedical.com

#### **Our vision**

To be the leader in providing quality medical and clinical care enhancing the well-being of patients.

#### **Our mission**

- To provide competent, quality medical care;
- To provide appropriate, relevant and affordable medical support services;
- · To contribute to the health of all Namibians;
- To provide an environment that enables all staff to develop their full potential;
- . To maintain efficient and cost-effective processes and procedures; and
- To apply the highest ethical standards

#### **SERVICES**

#### Sub-acute and rehabilitation

We offer an equipped isolation unit plus 10 private en-suite rooms meeting all our patients' needs. We offer:

- short-term post-surgical care,
- infections and specialized wound care,
- pain management,
- IV therapy,
- cardiac monitoring,
- nutritional counselling,
- restorative rehabilitation
- doctors-on-call (24-hour service)

We care for patients recovering from orthopedic surgery, strokes and respiratory and pulmonary failure. Our patients are cared for by specialized nursing staff and physician monitoring.

#### Frail Care/Palliative Care and Hospice services

Our long-term frail, palliative and hospice care patients receive the best of care. 24/7 nursing staff are here to attend to their every need.

#### Clinics

Highly-trained nursing staff perform primary health care services at our clinics.

A travel nurse is available every week day performing special services for insurance companies



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#### **Bronze Supporter**





## Become a supporter

It is easy to become a supporter as private person or as company.

Apply with us to become a supporting member that we can fulfil our objectives.

Contact us:

Email: <a href="mailto:ema-organisation@osh-med.pro">ema-organisation@osh-med.pro</a>

Telephone: +264 (0) 61 302 931











# **Emergency Call**



## Important information to give:

Where is the emergency?

What happened?

What kind of injuries?

How many injured person

Waiting for further question

## **Emergency Numbers:**

Ambulance services:

E.M.A. Rescue Service 9112

Fire Brigade:

Windhoek 061-21 1111

Police:

NamPol 10 111

City Police (Whk) 061-302 302

MVA Fund 9682

(all numbers are from GRN or non-profit organisations)



085

9112

d.o.c.



Service Hotline 085 - 9112

OSH-Med International and Emergency & Medical Assistance Service Hotline: 061 - 302 931



Emergency Call: 9112