OxyMask[™] ETCO₂ Handout



- OxyMask[™] ETCO₂ is an open mask system capable of providing CO₂ tracings while delivering a broad range of oxygen therapy.
- The adult OxyMask[™] ETCO₂ delivers 24 to 65% oxygen therapy simply by adjusting the oxygen flow rate from 1 to 15 liters per minute.
- End-Tidal CO₂ masks are commonly used for:
 - ✓ Non-intubated patients with side stream monitoring
 - ✓ Endoscopy
 - ✓ Bronchoscopy
 - ✓ Cardiac Cath Lab / Cat Scan / MRI
 - ✓ Interventional Radiology
 - ✓ Conscious sedation
- OxyMask[™] ETCO₂ is a highly efficient 'open' mask system that eliminates the need for a closed design, valves and reservoirs
 - ✓ Oxygen delivery is achieved through a pin and diffuser system designed to concentrate and redirect the flow of oxygen and provide ETCO₂ monitoring:
 - i. Oxygen enters the system through a right-angled swivel at the front of the mask.
 - ii. The mushroom-shaped Pin redirects the flow of oxygen, forming an organized pattern of vortices and a cloud of concentrated oxygen molecules.
 - iii. The triangular directional Diffuser refines the shape of the oxygen vortices and directs the flow towards the patient's nose and mouth
 - iv. During the patient's inhalation, oxygen flow is mixed with room air drawn in through the mask openings. Respiratory mechanics and breathing patterns determine how room air combines with the delivered oxygen. The concentration of oxygen received during the breath is a function of the oxygen flow compared to the patient's inspiratory flow and tidal volume.
 - v. During exhalation the Mask openings allow expired carbon dioxide to escape
 - ✓ Exhaled CO₂ is sampled through the mushroom shaped pin which is linked to an ETCO₂ sample line. This line can be attached to a side stream ETCO₂ monitor to obtain tracings
- Patient benefits:
 - ✓ Reduced feelings of claustrophobia
 - ✓ Increases communication
 - ✓ Improved accessibility to the mouth and nose
 - ✓ All of which improve patient comfort
- Clinician benefits:
 - ✓ These openings reduce the risks of re-breathing carbon dioxide and aspiration of emesis
 - ✓ Ease of access to the mouth and nose.
 - ✓ Allows for oral care and nasogastric tube placement while maintaining continuous oxygen therapy
- Operational Efficiencies
 - ✓ Reduced overall cost; less to purchase, stock, and maintain
 - ✓ Reduces medical waste and product clutter
 - ✓ OxyMasks are not made with natural rubber latex and phthalates such as DEHP



- OxyMask[™] ETCO₂ family of products
 - ✓ The adult End-Tidal CO₂ mask; fits 80% of adult patients
 - ✓ OxyMask[™] Plus End-Tidal CO₂ mask: 25% larger for patients with a larger face, and or a beard. May also be used on the patient whose mouth remains wide open while breathing
 - ✓ OxyMask™ Kid End-Tidal CO₂ mask: for children 3 to 10 years old, or within the weight range of 33 to 70 lbs / 15 to 32 kgs. These masks feature a 3D penguin design
 - ✓ OxyArm™ ETCO₂ is ideal for delivering oxygen while giving the clinician the ability to monitor carbon dioxide in trauma centres and burn units – as it has no contact with the face.
- To place the mask on the face:
 - ✓ Remove the OxyMask[™] ETCO₂ mask from the packaging
 - ✓ Recycle or discard the insert inside the mask
 - ✓ Gently rotate the elbow to release
 - ✓ Attach the universal connector at the end of the mask tubing to an oxygen source
 - ✓ Attach the ETCO₂ sample line to the side stream ETCO₂ monitor, to obtain tracings
 - ✓ Place the mask on the patients face
- Proper Fit:
 - ✓ An appropriately sized OxyMask[™] ETCO₂ mask will fit below the eyes, and cup the chin
 - ✓ The mask should fit parallel on the face
 - ✓ The swivel and diffuser pin assembly centered below the nose and above the upper lip
 - ✓ Position the elastic strap below the patients' ears or at the crown of the head, maintaining comfortable tension. Avoid pressure on the ears
 - ✓ Best ETCO₂ waveform will be obtained by properly positioning the mask
- Continuous O₂ therapy and monitoring ETCO₂
 - ✓ Adjust the oxygen flow from 1 to 15 liters per minute to achieve prescribed patient oxygen saturation or oxygen flow rate.
 - ✓ The tubing on the mask can be adjusted at the swivel to relieve any twist or torque
 - ✓ Allow the patient to stabilize, and assess
 - ✓ If necessary, adjust oxygen flow rate, to achieve or maintain the prescribed oxygen saturation
 - ✓ And again, a properly positioned mask will obtain the best ETCO₂ wave form
- OxyMask[™] is your one mask for patient safety, patient comfort, oxygen therapy compliance and End-Tidal CO₂ monitoring

