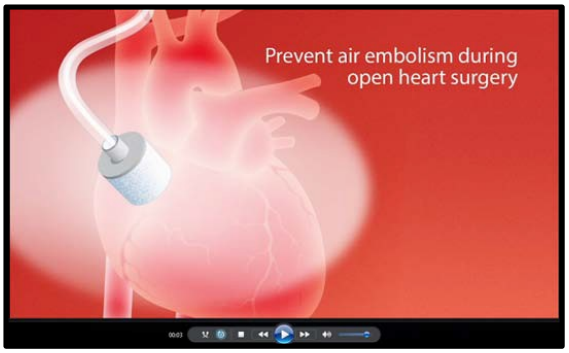
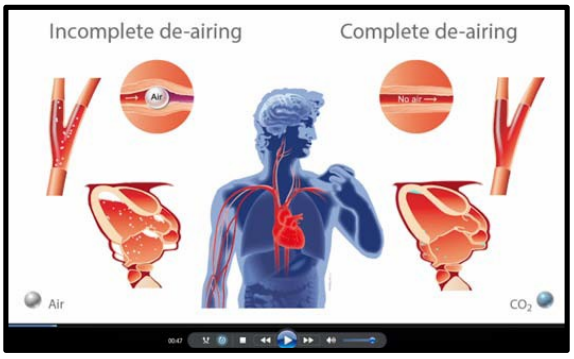
CarbonAid and CarbonMini CO_2 Diffuser device Video Talking points:

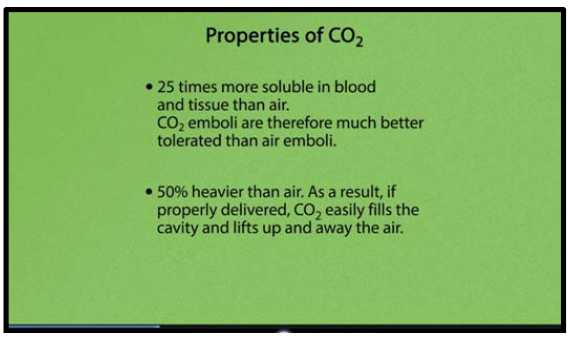
1. The CarbonAid and CarbonMini CO_2 Diffuser devices prevent air embolism during open heart surgery: CarbonAid for a full sternotomy opening or CarbonMini for a minimally invasive approach.

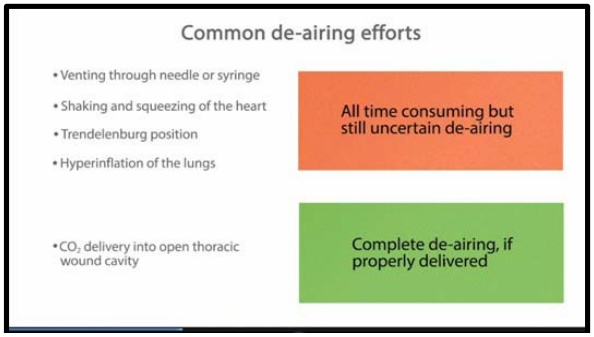


2. Air bubbles normally occur during open heart surgery. CarbonAid and CarbonMini provide complete de-airing, thereby preventing air bubbles from developing during open heart surgery. The CO_2 concentration will be close to 100 %.

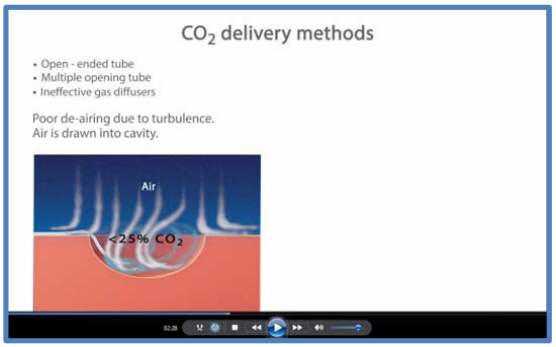


3. Commonly used de-airing techniques often take 15 – 20 minutes post surgery and in many cases, air bubbles still exist. Utilization of CO_2 properly delivered via the CarbonAid and or CarbonMini CO_2 Diffuser device during the time the heart or large vessels are open, provides complete de-airing, due to the unique properties of CarbonAid, CarbonMini and CO_2.

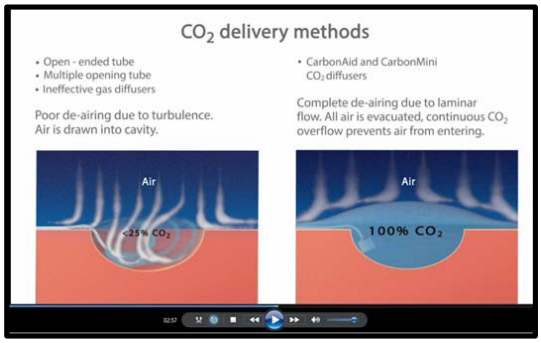




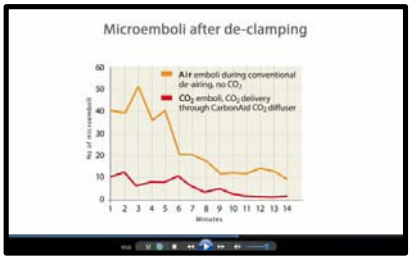
4. Commonly used “home-made” CO_2 delivery devices, such as open-ended tubing, deliver CO_2 with a high velocity, non-diffused manner, causing turbulence resulting in an air concentration above 75% to flow back into the surgical cavity.

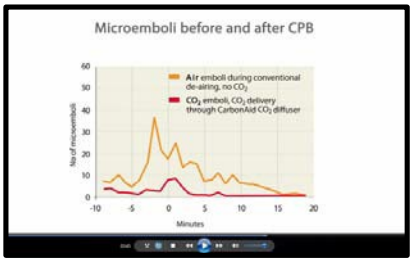


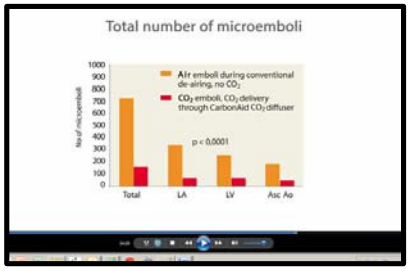
5. The CarbonAid and or CarbonMini Diffuser device deliver CO_2 in an efficient manner keeping close to 100% CO_2 barrier in the cavity preventing air to enter.



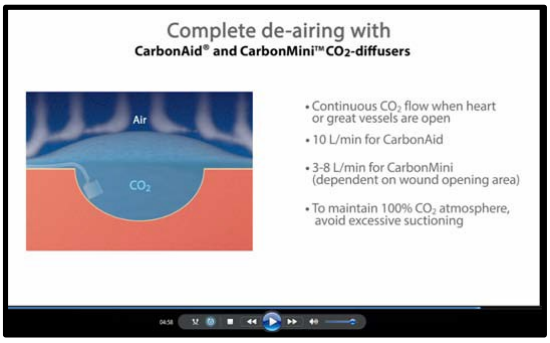
6. Rigorous research and field testing have shown that the use of CarbonAid or CarbonMini dramatically reduces micro emboli immediately following de-clamping and when weaning off Cardiopulmonary Bypass. The micro emboli reduction is statistically significant in the Left Atrium, Left Ventricle and the Ascending Aorta. The reduction of micro emboli is a result of the CO_2 atmosphere built up by CarbonAid and CarbonMini. CO_2 bubbles dissolves 25 times more quickly than air bubbles and therefore the total number of CO_2 bubbles will never be as high as the number of air bubbles and will be dissolved before reaching the brain.







7. Quick and complete de-airing can be achieved by utilizing continuous CO_2 flow: 10L/min with CarbonAid or 3 to 8 L/min with CarbonMini and avoiding excessive suctioning.



8. The key to the efficiency of CarbonAid and CarbonMini is that they provide a high CO_2 laminar flow in a diffused low velocity manner.