

Dr. [REDACTED] presentation -
Emergency Breathing Systems - Medical
Aspects

UKOOA

oil and gas for Britain

Emergency Breathing Systems

Medical Aspects

UKOOA Medical Adviser

EBS Systems in the UK

UK Offshore sector

- Compressed air
- Re-breather
- hybrid

Potential Hazards of EBS use

- Failure to deploy
- Added buoyancy
- Snagging of tube
- Deployment problems
 - Loss of contact with exit
 - Interference with escape of other passengers
- Trauma from mouthpiece
- Barotrauma

Pulmonary Barotrauma - Aetiology

- Force sufficient to cause 10% increase in lung volume
- 70mm Hg near surface
- Ascent of 1 meter to surface

Pulmonary Barotrauma - Risk

During emergency deployment:

- 262,500 man flights per year
- Average 11.2 flights per employee
- Approx 2.5 employees/year in incidents where EBS may have been deployed
- Risk of Barotrauma 1 in 5,000 dives
- Individual risk of barotrauma 1 in 46 million