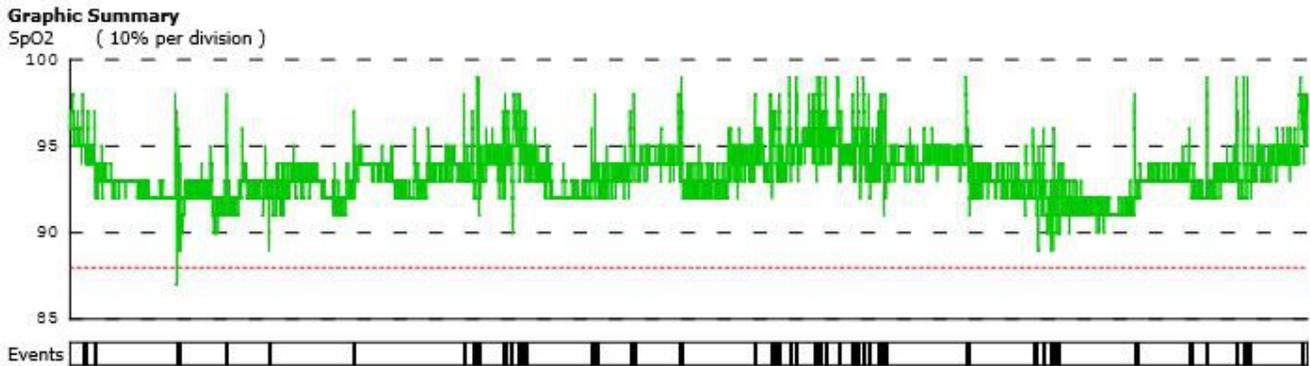


Steven Magee's Decreasing Blood Oxygen At Altitude

Steven Magee worked for a decade in high altitude astronomy and was quite sick after that time. He later discovered that his oxygen levels are erratic, a known long term adverse health effect of very high altitude exposures that he was never informed about. We take a look at how his oxygen levels vary with altitude during sleep.

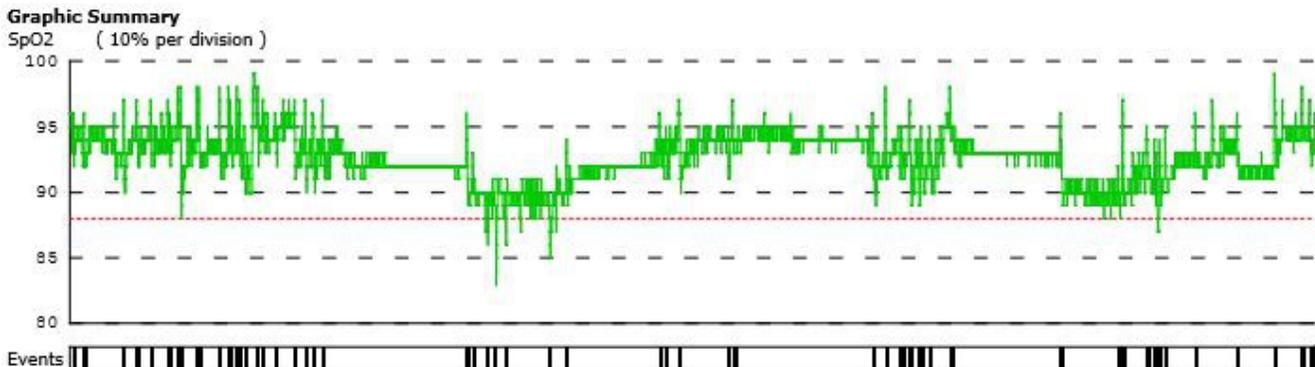
Sea Level: 17 – 18 December 2015

Blood oxygen (SpO2) averaged 93.4% for the night.



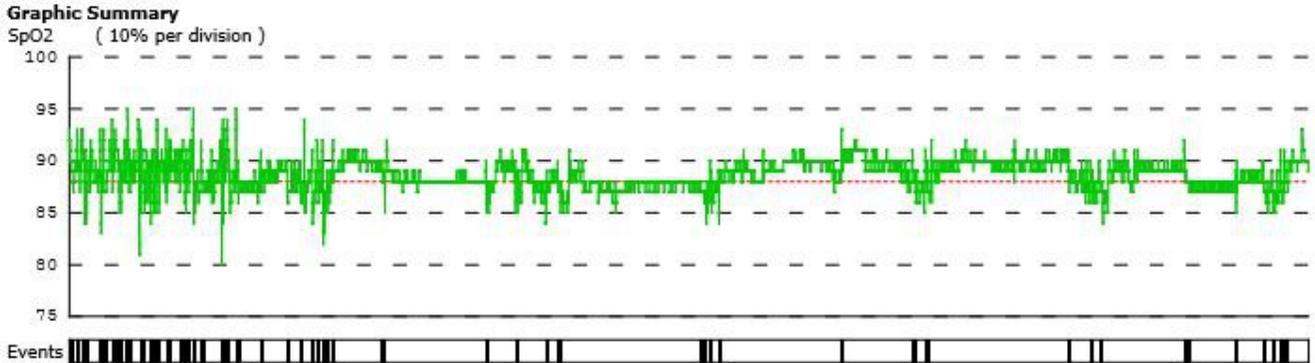
2,389 Feet: 10 - 11 January 2016

Blood oxygen averaged 92.7% for the night.



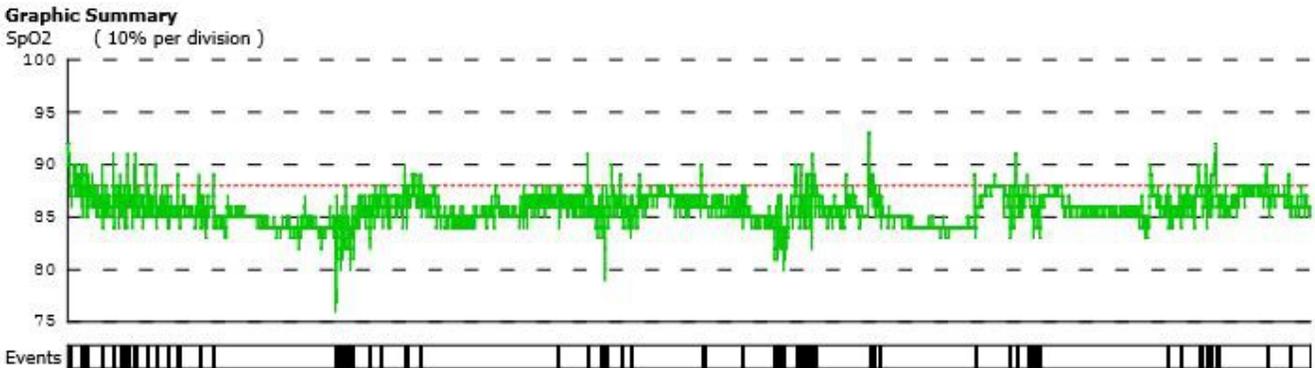
4,419 Feet: 8 - 9 June 2016

The night was spent around the red 88% dotted line. Blood oxygen averaged 88.7% for the night.



7,183 Feet: 10 - 11 June 2016

Most time is spent below the dotted red line which represents 88% where low blood oxygen levels become hazardous to human health. Blood oxygen averaged 85.8% for the night and was in the hazard zone. Steven Magee can no longer sleep at this elevation due to the health hazards it presents to him.



Summary

The long term damaging health effects of high altitude exposures are aggravated by increasing altitude. Note that the altitude range from sea level to several thousand feet is what people experience that fly in jet aircraft. Most jet aircraft are pressurized to the equivalent ground altitude of several thousand feet. As such, this study can be equally applicable to what happens to some people sleeping on jet aircraft.

Oxygen levels below 88% (Hypoxemia) are known to cause the following symptoms:

- Damage to eye sight.

- Deteriorating short term memory.
- Weakened muscles (your heart is a muscle).
- Muscle aches.
- Congestive heart failure.
- Heart attack.
- Headaches.
- Stroke.
- Increased pain.
- Reduced clarity/focus.
- Irritability.
- Aggression.
- Visions.
- Hallucinations.
- Potentially create life threatening cranial nerve stimulation.
- Obesity.
- Lowered immunity.
- Fatigue.
- Circulation problems.
- Anxiety.
- High blood pressure.
- Depression.

Conditions that can cause oxygen levels below 88% (Hypoxemia):

- Anemia.
- Heart defects present at birth (congenital heart disease).
- COPD.
- Emphysema.
- Being at high altitudes.
- Long term high altitude damage (Mountain climbers, skiers, astronomers, and so on).
- Pneumonia.
- Shock.
- Sleep apnea.
- Obesity Hyperventilation Syndrome (OHS).

People with a high altitude history and blood oxygenation issues are advised to live at sea level. Be aware that jet aircraft travel may bring on the symptoms of low oxygen levels. High altitude above 10,000 feet is known for the range of damage it can do to mental and physical health in sea level adapted humans and should be avoided.

Interesting Quotes and Internet Links

- “Low Oxygen Levels: How Low is Too Low and Should You Worry?”
<http://heartfailuresolutions.com/34/oxygen/low-oxygen-levels-how-low-is-too-low-and-should-you-worry>
- “Dangerous Blood Oxygen Levels” http://www.ehow.com/about_5514172_dangerous-blood-oxygen-levels.html
- “How serious can oxygen saturation below 90 be?”
<https://healthunlocked.com/blf/posts/1124473/how-serious-can-oxygen-saturation-below-90-be>
- Oxygen Level Too Low? <http://www.drweil.com/drw/u/QAA401048/Oxygen-Level-Too-Low.html>
- “Dangerous blood oxygen levels” http://www.ehow.co.uk/about_5514172_dangerous-blood-oxygen-levels.html
- “Open Letter to the Astronomical Community” <http://www.environmentalradiation.com/Open%20Letter%20To%20The%20Astronomical%20Community.pdf>

“Working on the summit of Mauna Kea was comparable to working on the hospital pulmonary ward with sick people sucking on oxygen cylinders.”

Steven Magee – Author of Health Forensics