Is Your Patient **Safe to Fly?**

**Overview:**
The cabin of a commercial aircraft at cruising altitude is not pressurized to sea level. Most are pressurized to 8,000 feet of altitude. This is the equivalent to standing at the top of Mount Olympus. In addition to the stressors of navigating a busy airport terminal, security line, and boarding area, many wish children have specific health concerns affected by air travel. Careful consideration should be given to the effects of low barometric pressure (causing a 33 percent expansion of gas), low oxygen environment (16 percent oxygen in cabin air rather than 21 percent at sea level), low humidity and lack of mobility, and how these conditions will affect the wish child for several hours while in an airplane. The duration of the flight is of significant importance. The longer the flight, the more environmental factors will contribute to the child’s health during and up to 48 hours following the flight. Please consider these factors before approving your patient for a travel wish.

### CURRENT RECOMMENDATIONS FROM EXPERTS IN AVIATION MEDICINE:

<table>
<thead>
<tr>
<th>Anticipatory Guidance/Careful Consideration</th>
<th>Air Travel Postponement</th>
<th>Discouraged from Air Travel</th>
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</thead>
<tbody>
<tr>
<td><strong>Precautionary oxygen is recommended for:</strong></td>
<td><strong>Wait until fully recovered to fly if:</strong></td>
<td><strong>Individuals with the following conditions are at risk of a medical event in the air or 48 hours after their flight:</strong></td>
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<tr>
<td>• NYHA III - Heart failure - Pulmonary Hypertension</td>
<td>• Admission to hospital for:</td>
<td>• Oxygen requirements 4L/min or greater at sea level</td>
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<tr>
<td>• Angina/chest pain Class III</td>
<td>- Acute respiratory illness</td>
<td>• Vital lung capacity less than 1 L</td>
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<tr>
<td>• Cyanotic congenital heart disease NYHA I, II &amp; III</td>
<td>- Acute heart failure</td>
<td>• FEV1 &lt;50% predicted</td>
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<tr>
<td>• Oxygen dependence at sea level</td>
<td>- Uncontrolled hypertension</td>
<td>• NYHA IV</td>
</tr>
<tr>
<td>• Cystic fibrosis with SpO2 falls below 90 percent at sea level</td>
<td>- Chest pain or change in medications</td>
<td>• Heart failure</td>
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<td>• Long-term oxygen requirements in the past six months</td>
<td>- Pneumothorax</td>
<td>• Pulmonary hypertension</td>
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<tr>
<td>• Muscular dystrophy</td>
<td>- Pleural Effusion</td>
<td>• Cyanotic congenital heart disease</td>
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<tr>
<td>• Kyphoscoliosis</td>
<td>- Internal Cardiac Defibrillator (ICD) insertion</td>
<td>• Angina (chest pain) Class IV</td>
</tr>
</tbody>
</table>

**Other Conditions at Risk:**
- Chronic liver disease
- Hepatopulmonary syndrome
- End stage liver disease
- Chronic hepatitis
- Lymphangioleiomyomatosis
- Hematology thromboembolic disease (blood clots)
- Neoplasm
- Obesity
- Chronic venous insufficiency
- Chronic heart disease
- Sickle cell disease
- Epilepsy
- Home-skilled nursing services required

**Airline Specific Requirements for:**
- CPAP
- Ventilator support
- Controlled prescriptions
- Panic disorder
- Sitting upright

**For more in-depth information, please visit md.wish.org.**