

Health problems created by **unsafe air conditions in airplanes** and especially problems caused by **bleed air** have been recognized by European governments and organizations, yet they are largely ignored by the airlines and oil companies in the United States. Or, even worse, that serious health problems can be caused by breathing in **toxic air** from airline cabins has been denied despite strong evidence of its effects.

Bleed air is air which comes into an airline cabin through the air conditioning intake. Air passes through the jet engine and generally goes three places. One place is past the engine, hydraulic oil, and then into the cabin to be cooled as cabin air for the crew and passengers. Oil in the APU can also become hydrolized and cause the same injury.

When there is a hydraulic leak, the oil is heated dramatically by the engine. This heating gives the hydraulic oil toxic characteristics. This toxic air is introduced into the cabin to be breathed in by passengers and crew alike. Depending on the severity of the leak and a person's sensitivity or exposure, toxic poisoning can, and does occur in various degrees. Immediate symptoms include flu like symptoms, **difficulty breathing**, coughing, light headedness or **giddiness**, headaches, and other symptoms. Actual physical effects which may not be immediately recognizable can be: permanent or temporary **brain injury or damage**, **neurological damage**, vision problems, short term **memory loss**, uncontrollable intermittent shaking of a hand or body part, numbness in extremities, aching of muscles, and what has been described as lupus like or menier's like symptoms.

The pyrolized, or burnt, oil (TCP) is breathed in and circulated throughout the body. Small oil leaks can secrete these fumes over time. Long term exposure in flight crew has been shown to cause these symptoms and damage. Because the problem has been ignored or denied, many flight crew have been told they have other diseases or problems which mimic lupus, multiple sclerosis, or menear's disease, among other disorders.

These leaks are not uncommon. They are in many, many aircraft. Some models have more problems than others. (Refer to the links on the home page.) Recently, it was stated that it would cost **\$10,000.00 per aircraft to fix the problem**. Why are they not doing that? I think we all know the

answer, money. What is more important, a person's health or the cost. Plus, with the 'powers that be' saying that there is no problem, how many more people must get sick, or neurologically damaged before someone acts.

Cabin crew, including pilots, have related their individual experiences and health problems, as well as instances where a pilot almost lost consciousness while piloting a commercial aircraft, all thought to be related to toxic cabin air. Please read the websites which are linked on our home page. These are only a few of the articles and studies available on the web. Because it has been denied and ignored, many doctors are not aware of the possibility of toxic air exposure due to burnt hydraulic oil on planes and, therefore, may not realize what is causing a person's symptoms. Educate them. [www.aopis.org](http://www.aopis.org) has a link to a great DVD which explains the problem in detail with personal comments by some people exposed. This is a good starting place for anyone, including professionals, to educate themselves.

We urge you to educate yourself and others to become aware. If you feel you have been exposed to toxic cabin air or know someone who has, please **post your information on our experiences page** so that we can learn, share, gather information, and spread the information to others, as well as the medical community. You may contact us for experts and/or doctors who may be familiar with the TOCP exposure.

Please read the article where Boeing responds to the British Parliament that it's newer planes will eliminate the problem of bleed air fumes. The manufacturers, the airlines, and the oil companies have been aware of these problems for years and have done nothing about it and have done **nothing to warn** the passenger, or the crews.

Please spread the word. And **next time you fly**, do not assume the 'dirty sock' smell is the passenger next to you. Burnt hydraulic oil is said to smell like dirty socks. It is going to take a lot of people--- passengers, crew, and the medical community--- and, we are afraid, a lot of time to bring this to the forefront.

Why does no one know or seem to care? Please read the attached links, and look for more! The leading medical doctor in this area is Dr. Peter Julu in the UK. Search his name and read more on what he has found.