



« FUME EVENT » GUIDE

(also for passengers)

INFLIGHT

Cockpit

Required Proceduresapply

Apply operator procedures according to the respective aircraft operation manuals. To date all operators should have established appropriate procedures. References could be:

Identification of Smoke/Fumes/Smell

(e.g. «Oil Smell» or «Unknown Origin»),

Use of Oxygen Masks

Emergency Declaration

Landing at nearest suitable Airport

Cabin

Cockpit and Purser.....inform

Report unusual smell occurrences ASAP.

Self Protection Measures.....apply

Immediately initiate self-protection measures in analogy to

Dangerous Goods Procedures

e.g. make use of smoke hoods, avoid any further exposition as much as possible. Direct use/appliance of crew oxygen may be recommended.

ON GROUND

Cockpit

Tech-Log Entry.....perform and copy

Copy the entry (take a picture with your portable phone) and save it for your own and your colleagues documentation and archive. Refraining from making such an entry, especially if the incident becomes reported by a third party may lead to labour law and/or criminal sanctions for the responsible commander. According to EU regulations 996/2010 and 376/2014 the commander is responsible for reporting the « incident » to the operator and to the respective aviation authorities. According to EU regulation 376/2014 also every member of the crew as well as ground staff or passengers may report such an occurrence, free of any sanctions (by employer or others) to these authorities. Do not rely upon that « someone else will perform the required reporting » (no report = no later claims or compensation).

Cabin

Flight manifest, names of witnesses.....keep and safeguard

Keep and safeguard copies of all flight documents. These may incorporate important information, such as the aircraft registry as well as the names of witnesses among the crew and third parties. This may become vital at a later time.

I. Medical doctor/Hospital.....consult and see ASAP

(Follow the applicable company procedures for a «work related accident»)

The spectrum of symptoms may change with the possibility of additional symptoms. Those already present may worsen. They may appear immediately, after several days or weeks or even never.

Such symptoms may be:

stomach aches, nausea, vomiting, permanent need of urination, muscle weakness, flu like states, problems with balance and motor skills, numbness, tingling sensation, inflammation of the cheeks, vision problems, respiratory problems (lack of air), problems with the heart and blood pressure, as well as severe headaches .

Long-term symptoms may include: **fatigue, lung problems, memory loss, problems with concentration and speech, problems of the peripheral nervous system.**

Given that the half-life of certain substances is only a few hours, it is essential to **collect as soon as possible blood and urine samples**. Advise medical staff of these facts, especially if delays become evident to be encountered.

After an incident with suspected cabin air contamination it is in your own best interest to compile a complete medical documentation, including diagnosis in case of subsequent medical problems that may require a work related injury record. Therefore:

1. have a complete **blood count (CBC), white blood count (WBC) and differential, liver transaminases, creatine kinase with isoenzymes (AChE determination)** performed. Also ask for a **CO-Hb (Carboxyhemoglobine) determination for forensic purposes** and a **blood gas analysis/earlobe blood gas analysis** including **CO-Hb and/or oxygen saturation**. Warning: **Smoking may impact the measurements**.
2. sample the **first 3 urines after the event**
(each sample separated into a clean container. Urine sampling containers can be purchased ahead in every drugstore or pharmacy at low prices and readily stored in your personal on board flight kit). Keep them deep frozen or at least refrigerated ASAP when home or at a hotel.
3. have all symptoms such as of **heart rhythm disorders, ECG recording, shortness of breath, lung function disorders** examined by specialized medical personal and documented.

Document (with dates and times / time zones) the sensations of the cabin air event. Try to describe the extent of it, the smells and maybe visual appearance and the symptoms. Also document time of sampling blood and/or urine. Document all symptoms you encounter and have them investigated by medical professionals informed about the nature of such events, the substances released and their effects on the human body.

II. Further examination

After securing all initial evidences you may want to have you referred to medical personal with experience in cabin air contamination events. These could be:

1. **Ambulance for Occupational- and Environmental Medicine of the Medical University of Goettingen, Dr Astrid Heutelbeck** (speaks English).

Address:

Institut für Arbeits-, Sozial- und Umweltmedizin

Waldweg 37B, D 37073 Goettingen

Germany

Tel: +49 551 39 49 50

24 hrs. **medical hotline** in case of acute events: **+49 151 12 19 09 04**

(Deputy medical director of the institute, Dr Heutelbeck has seen more than 150 crewmember and passengers after acute events in the last 3 years. EU member health insurances may be accepted)

2. **Aviation Medical Consultation**

Michel F.A. Mulder (MD)

Karbouwstraat 14

NL 1402 VC Bussum

The Netherlands

aeromed@neomailbox.ch

Tel: +31 35 30 30 100

(Dr Mulder is a former KLM pilot and medical doctor, residing in the Netherlands. He has conducted intensive research over the last 8 years, published numerous articles on the subject and has been seeing and treating victims of poisonings. **Private consultations only.**)

III. More information

Additional information may be received via your union and/or its health representatives. Also there is information provided by several institutions and through websites. These are:

1. www.aerotoxique.fr - webpage of the Association des Victimes du Syndrome Aérotoxique (AVSA), French speaking.
2. www.aerotoxiciteam.com - webpage and contact for Bearnairdine Beaumont, former Lufthansa chief flight attendant, located in Switzerland (speaks English)
3. www.aerotoxic.org - webpage of the Aerotoxic Association UK, Cpt. John Hoyte
4. www.bleedfree.eu - webpage of tvbmedia productions, producers of the award winning documentary film by Tim van Beveren on aerotoxic syndrome, containing numerous scientific studies and other evidence (in German and English language)