

Alcohol consumption and medical aviation safety

Alcohol is a legal recreational drug that is used by many people. While alcohol can be consumed and enjoyed in a way that does not jeopardise aviation safety, it is also possible to engage in patterns of alcohol consumption that are not safe.

What blood alcohol level is ok for flying?

There is no measurable level of blood alcohol that is safe for aviation. Any elevation of your blood alcohol level is associated with a reduction in your performance and capabilities (impairment), and so reduces your ability to fly safely.

The civil aviation legislation (See ‘looking at the law’ section at the end of this MIS) requires pilots, acting in their official capacity, to not be ‘intoxicated’ so as to be impaired. Those provisions (Civil Aviation Rule 19.7) continues to relate the impairment to the consumption or use of “any intoxicant, sedative, narcotic, or stimulant drug or preparation”, which clearly includes alcohol which is both an intoxicant and a sedative.

What about ‘bottle to throttle’ time?

There is no legislated time period, after drinking alcohol, where you can rely on being safe for aviation. While having a zero blood alcohol level is essential for aviation safety it is also possible to have such a level and still be unsafe due to other effects of alcohol, including a *hangover*.

Some operators attempt to encourage safe alcohol consumption patterns in their aviation personnel through having ‘bottle to throttle’ policies.

To consume alcohol and fly safely it is necessary to:

- Drink very moderately at all times;
- Not fly under the influence of alcohol, even when you feel fine but still have an elevated blood alcohol level;
- Not fly if you are subject to any adverse effects of alcohol, even if your blood alcohol is likely to be at a zero level;
- If there is any doubt or question at all, concerning your alcohol-related safety, then choose the safe option and don’t fly ... until you can be entirely confident that you are 100% safe.

Does CAA pull medical certificates if you get a drink-drive charge?

The CAA considers a drink driving episode to be a warning or ‘red-flag’ for the possibility of unsafe drinking habits. As such a drink driving episode, whether or not a conviction ensues, is considered to be a serious matter in respect to aviation safety.

Upon becoming aware of a drink driving episode the CAA, usually via a Medical Examiner, will seek further information in an effort to clarify the applicant’s drinking habits and to ensure that they are safe. Depending on the nature, recency, and frequency of any drink driving episodes the CAA may seek:

- Further information to confirm the number and nature of drink driving episodes, or other alcohol-related matters that may suggest the potential for unsafe drinking behaviours;

- Clinical assessment of the applicant by a Medical Examiner, an addiction medicine specialist, or another health practitioner;
- Blood / urine tests;
- Information from other people.

The CAA may also suspend / disqualify a medical certificate or impose conditions on a medical certificate while the further information is being sought.

Once the further information has been received a variety of options are possible, ranging from no further action against the medical certificate through to suspension / disqualification.

How bad does drinking need to be for CAA to suspend a medical certificate?

There is no easy answer to this question. Each case is assessed on its individual merits.

In the past people have attempted to suggest algorithms (e.g. No drink drive conviction for more than two years is ok) for determining whether an applicant's drinking behaviour is safe. While this approach has not proven to be satisfactory, the following can be said:

1. Higher levels of alcohol consumption are generally less safe;
2. More recent adverse alcohol-related events (e.g. drink drive conviction) are generally less safe;
3. More frequent adverse alcohol-related events are generally less safe;
4. Alcohol-related changes (e.g. in blood test results) or alcohol related diseases are generally considered to be less safe.

An isolated drink-drive conviction is unlikely to result in removal of medical certificate privileges unless there are other factors suggesting the offence is actually 'the tip of the iceberg' of an unsafe drinking pattern of behaviour. At the other end of the spectrum an alcohol dependant person (*alcoholic*) is unlikely to be returned to flying until after they have completed a rigorous treatment program, and an adequate period of time has elapsed without their consuming alcohol. Even then they will be monitored very closely upon their return to flying.

Can someone get back to flying after serious alcohol problems, like alcoholism?

Yes, this is possible. The CAA adopts a disease model when considering serious alcohol problems. In doing this we do not consider (e.g.) alcohol dependence to be a character flaw, or a moral failure, but a disease or medical condition. The corollary to taking this approach is that we also believe that someone who may be (e.g.) alcohol dependant can be adequately treated and monitored and returned to aviation safely.

This is rarely easy, and not everyone is able to achieve such a success, but there are pilots and air traffic controllers who have succeeded in demonstrating adequate treatment and ongoing safe behaviour, after severe alcohol problems ... and have returned to being safe and active operational members of our aviation community.

Our experience suggests that the probability of success, in returning to flying after a serious alcohol problem, is improved by residential inpatient rehabilitation and good support networks at the workplace and home.

How do I get my medical certificate back after a serious alcohol problem?

Alcohol problems vary, as does their severity from an aviation safety perspective. Generally, however, to return to flying after a serious alcohol problem you will need to satisfy the

CAA that you are now entirely safe, and that will most probably include the following.

1. Successful completion of an appropriate alcohol rehabilitation treatment program. For serious alcohol problems we believe that inpatient treatment programs, where you stay in the facility, are superior to others. This often takes a month, sometimes longer.
2. Subsequent ongoing abstinence from alcohol and other drugs, for a suitable period of time. The time period will vary, with the severity of the problem and the nature of aviation undertaken, from several to many months.
3. Establish networks to support and maintain the treatment and ongoing abstinence. People providing this support are also able to provide close regular surveillance and reports confirming continued safe behaviour.
4. Regular periodic review, including blood and other tests, by an alcohol / addiction medicine specialist.

I can control my drinking behaviour

Most people drink moderately, or not at all, and are well able to control their drinking behaviour. However, people with more serious drinking problems have often lost a lot of the control they need to maintain safe drinking patterns. This loss of control is a feature of many drinking and other drug use problems.

It may be possible for people with milder drinking problems to modify their behaviour and adopt safer, more controlled, patterns of alcohol consumption. The CAA does not view controlled drinking as being an adequately safe method of managing the more severe alcohol related problems and will usually require inpatient rehabilitation programs and ongoing abstinence before considering such applicants for medical recertification.

But I'm not an alcoholic?

There are many patterns of alcohol use that are unsafe from an aviation perspective but would not result in the person being labelled as alcohol dependent or *alcoholic*. The CAA is concerned with all patterns of drinking that reduce safety, not just those of alcoholics.

I want to get my medical certificate back. What should I do?

While the details will vary there are some common features that CAA looks for when considering returning someone to flying (or ATC) status after a significant alcohol problem has been identified.

1. Treatment. Adequate and appropriate treatment will need to have been undertaken and completed.
2. Demonstrated established safe usage pattern. The applicant will need to have established, and be able to adequately demonstrate (usually through regular reports from others) a reliable and safe relationship with alcohol.
3. Support network. Formal and informal networks of people, at work and elsewhere, are important in providing support to those recovering from alcohol related problems and also act as a very useful first-line in identifying possible relapses into unsafe consumption patterns.
4. Periodic review. Ongoing medical review, and often associated blood / urine testing, is also an important element of CAA remaining satisfied that the established safe relationship with alcohol continues. Usually this form of review is more intensive early

in the recovery period and becomes less frequent and less intrusive over time.

What if I don't agree with a decision concerning my drinking behaviour?

You are always able to seek review of CAA medical certification decisions. For further information on review / appeal options you may wish to consult MIS 005 'What Are My Review Options?'¹ or the medical section of the CAA website (www.caa.govt.nz). Medical Information Sheets can be downloaded from the CAA website at — http://www.caa.govt.nz/medical/Med_Info_Sheets/Med_info_sheets.htm

Looking at the law

Civil Aviation Rule Part 19: Transition Rules

The main provision that precludes people for aviation activity while they are suffering the effects of alcohol can be found in Part 19 of the Civil Aviation Rules.

19.7 Intoxicating liquor and drugs

No crew member while acting in his or her official capacity shall be in a state of intoxication or in a state of health in which his or her capacity so to act would be impaired by reason of his or her having consumed or used any intoxicant, sedative, narcotic, or stimulant drug or preparation.

Civil Aviation Rule Part 67: Medical Standards & Certification

The medical standards that relate to alcohol / drug use can be found in Rules 67.103 (Class 1), 67.105 (Class 2), and 67.107 (Class 3). The general provisions that require an applicant to have "no medical condition that is of aeromedical significance*" will also apply. There are also other areas of Rule Part 67 that relate directly or indirectly to the aviation safety aspects of alcohol and alcohol consumption. Some of these are listed below.

67.3 Definitions

Psychoactive substances means alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, but excludes coffee and tobacco.

67.55 Applications for medical certificates

An applicant for a medical certificate must— ...

- (4) disclose or authorise the disclosure to the Director and the medical examiner of any information relating to the applicant's medical condition or history, including information concerning any conviction for an offence involving the possession or use of drugs or alcohol that the Director may reasonably require under section 27D(2) of the Act to determine whether the applicant satisfies the standards for a medical certificate.

67.103 , 105, & 107: Medical standards for class 1, 2, & 3 medical certificates

Nervous system

(c) An applicant must— ...

- (4) have no history or diagnosis of the use of any psychoactive substance that, having regard to any relevant general direction, interferes or is likely to interfere with the safe exercise of the privileges or the safe performance of the duties to which a (class 1 or 2 or 3) medical certificate relates; and
- (5) not be taking any psychoactive substance that, having regard to any relevant general direction, interferes or is likely to interfere with the safe exercise of the privileges or the safe performance of the duties to which a (class 1 or 2 or 3) medical certificate relates.

CAA Medical Help Desk

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