MARINE GUIDANCE NOTE

MGN 193 (M+F)

Maritime and Coastguard Agency

The Effects of Alcohol or Drugs on Survival at Sea

Notice to Ship Owners, Certifying Authorities, Surveyors, Masters, Skippers, Officers and Crews of all Merchant and Fishing Vessels and all Seafarers

Summary

This Guidance Note draws attention to the risks associated with the consumption of alcohol and the abuse of drugs in relation to the chances of survival at sea.

Key Points

- Alcohol should be carefully avoided if exposure to cold is likely
- Alcohol speeds up the rate of body cooling, and thus increases the risk of of hypothermia
- Any alcohol may be dangerous, but the higher the resulting blood alcohol level, the greater the danger, particularly above 80 mg per 100 ml
- All drug abuse should be considered to be detrimental to survival

1.0 Introduction

1.1 Recent incidents have highlighted the adverse effects of alcohol and drugs on the chances of survival at sea. These guidelines are intended to raise awareness of the increased risks.

2.0 Alcohol, hypoglycaemia (reduced blood sugar level) and hypothermia (reduced body temperature)

2.1 There is clear scientific evidence that even quite moderate alcohol consumption normally leads to a reduction in blood sugar, (hypoglycaemia) which is made worse by exercise and/or fasting. In turn, this can impair the body's response to cold, meaning that an individual loses body heat faster than usual and is at increased risk of hypothermia.

2.2 For this reason alcohol should be strictly avoided particularly if there is a risk of exposure to cold accompanied by exercise (including shivering in response to that cold) and / or fasting.

3.0 Maximum blood-alcohol levels

3.1 There is wide variability in the effect of a given amount of alcohol on different individuals. The most harmful effects of alcohol have been reported in experiments in which the blood alcohol has exceeded 80 mg per 100 ml (the drink – drive limit). However, in some cases, significant adverse effects have been reported with much lower blood – alcohol levels.

3.2 Any alcohol may be dangerous, but the higher the resulting blood – alcohol level, the greater the danger, particularly when it is above 80 mg per 100 ml.

4.0 Other substances that may be detrimental to survival at sea

4.1 There is a large range of different types of drug that are known to be abused, which have widely varying effects on the body. Certain drugs, in particular barbiturates, morphine and its relatives (including opium)

are well known for increasing the risk of hypothermia. Of greater concern, and particularly in relation to cannabis, 'ecstasy', and many other drugs, is the fact that they impair mental faculties that are so essential during immersion survival. It is also worth noting that alcohol and other drug abuse are likely to impair perception and memory, and thus prevent survivors from giving their rescuers an accurate account of events.

4.2 Abuse of all drugs should be considered to be detrimental to survival.

5.0 Rescue of those under the influence of alcohol or drugs

5.1 Anyone involved in rescue at sea should be alert to the additional problems, such as difficulty in co-ordination and hypothermia, which may affect or impede the rescue of an individual who is affected by alcohol or drugs.

Seafarer Health and Safety Branch
Maritime and Coastguard Agency
Spring Place
105 Commercial Road
Southampton
SO15 1EG

Tel: 02380 329247
Fax: 02380 329251

July 2001

MC 5/19/046

DTLR
TRANSPORT
LOCAL GOVERNMENT
REGIONS

An executive agency of the Department for Transport, Local Government and the Regions