

# **Alcohol Dependence**

#### Background

Alcohol dependence, also known as alcoholism or alcohol addiction, has been recognized as a disease in Germany since 1968. In total, 3.1 per cent or 1.6 million persons in Germany are dependent on alcohol: 4.5 per cent of all men and 1.7 per cent of all women<sup>1</sup>. Addiction is associated with a high risk of alcohol-related diseases, accidents and reduced life expectancy<sup>6</sup>.

## Symptoms

Alcohol dependence usually develops slowly and imperceptibly. It is much more common in men than in women, and much more common in young people than in older people. Alcohol addicts have a strong craving for alcohol and difficulties controlling their drinking behaviour. Regular alcohol use leads to the development of a tolerance that requires an ever-increasing amount of alcohol to be consumed to achieve a noticeable effect. The interruption of alcohol use often results in physical withdrawal symptoms such as tremors, restlessness, sweating, sleep disturbances and circulatory problems, and may also include seizures or confusion (delirium). (Fig. 1)

### Causes

Biological, psychological, and social factors are involved in the development of alcohol dependence. Approximately 60 per cent of alcohol dependence is genetically determined<sup>8</sup>. In addition to the physiological effects of alcohol in the brain, alcohol consumption is associated with certain situations through learning processes, so that conditioning occurs. As a result, these situations can trigger a strong urge to drink alcohol. Environmental factors that promote addiction include psychological stress, such as lack of caregivers in childhood, or difficult social situations, such as poverty or exposure to violence. Cultural attitudes towards alcohol can also contribute to dependence. Psychiatric disorders often co-occur with alcohol dependence. These include schizophrenia, depression, bipolar affective disorder, anxiety disorders, post-traumatic stress disorder, attention deficit hyperactivity disorder (ADHD), eating disorders, nicotine dependence and other substance use disorders.<sup>4</sup>

#### Consequences

Alcohol dependence can have serious physical, psychological and social consequences<sup>10</sup>. It leads to mutually reinforcing

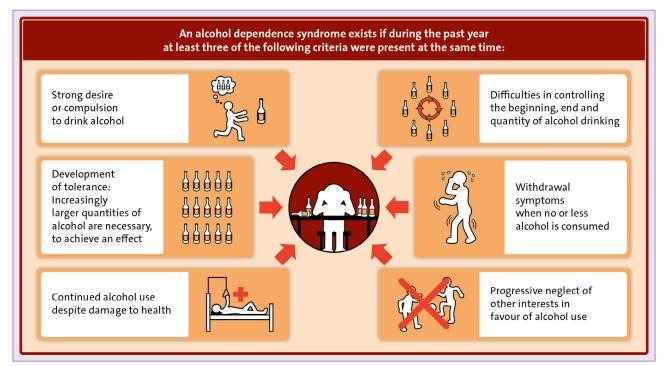


Figure 1: Diagnostic criteria for alcohol dependence (according to ICD-10, F10.2). Source: Deutsches Krebsforschungszentrum 20227. Illustration: German Cancer Research Center, Cancer Prevention Unit, 2023



interactions in the lives of those affected, known as a "vicious circle".

Alcohol is a cytotoxin that, once in the bloodstream, spreads throughout the body and, especially in large quantities, can damage all organs. Alcohol has been implicated in the development of more than 200 diseases, including liver disease, various cancers, cardiovascular disease, type 2 diabetes, respiratory diseases and injuries<sup>7</sup>. Alcohol use can cause personality changes and can have serious effects on mental health. In pregnancy, alcohol is one of the most common preventable causes of birth complications and developmental disabilities. It can harm the unborn child, including permanent physical and mental disabilities such as fetal alcohol syndrome (FAS)<sup>13</sup>.

Alcohol dependence usually leads to far-reaching stress situations in the social environment, for example in the family and at work, as well as problems in the daily structure or the financial situation of those affected<sup>5</sup>. It also has harmful effects on others, such as premature birth, abortion, violence, and accidents<sup>5,9</sup>. Relatives of alcohol addicts are at high-risk for developing health issues<sup>3,12</sup>. Alcohol is considered to be the most harmful psychoactive drug because it has significant negative effects on both users and those around them<sup>11</sup>.

### Treatment

Risky, harmful, or addictive drinking should be diagnosed and treated early. Without professional help, it is almost impossible to overcome alcohol dependence. The aim of treatment is to stop drinking, or at least to reduce the amount of alcohol consumed, as an intermediate goal on the way to total abstinence. If necessary, the person must be reintegrated into society. The earlier treatment is started, the greater the chances of success. (Fig. 2)

Treatment of alcohol dependence is only successful if patients are willing to change their behaviour<sup>2</sup>. Inpatient treatment is more promising than outpatient treatment<sup>6</sup>. The costs of inpatient detoxification are covered by health insurance, and the costs of rehabilitation are covered by pension insurance.

Motivation phase	Acute treatment	> Medical rehabilitation	> Stabilization
Early intervention	Physical detoxification	Alcohol cessation	Aftercare
Aim: Counselling increases motivation for treatment Implementation: Screening, brief intervention Duration: Days to months Acting institution: General practitioner/specia- list, psychosocial counselling centre, workplace Funding: Voluntary community funding ("General Welfare")	Aim: Prevention of serious withdrawal symptoms Implementation: Medical supervision, administration of medication Qualified withdrawal treatment Aim: Prevention of serious withdrawal symptoms and motivation for further treatment Implementation: Detoxification and psycho- and socio-therapeutic and psychosocial treatment Duration: 2–3 weeks Acting institution: Inpatient/outpatient in clinics, psychiatric facilities, specialist outpatient clinics	<ul> <li>Aim: Increasing the chance of long-term abstinence; if necessary, interim goal: reduction of alcohol use</li> <li>Implementation: <ul> <li>outpatient: Psychotherapy</li> <li>inpatient: Psychotherapy, sociotherapy, occupational therapy, relapse prophylaxis, treatment of comorbidities, determination of aftercare measures</li> </ul> </li> <li>Duration: <ul> <li>outpatient: 12–18 months</li> <li>inpatient: 6–16 weeks</li> </ul> </li> <li>Acting institution: <ul> <li>outpatient: Psychosocial counselling and treatment facilities</li> <li>inpatient: Rehab clinics</li> </ul> </li> <li>Funding: Pension or health insurance</li> </ul>	Aim: Balanced and satisfied emotional life, (re)integra- tion into working life, social participation Implementation: Dealing with the problem of addiction, creating new social contacts and perspec- tives, integration into a support group. Duration: Several weeks up to years Acting institution: Doctor, counselling, adaptation facilities, self-help groups Funding: Pension insurance, in some cases also health insurance or local authority funds

Figure 2: Treatment of alcohol dependence and corresponding facilities. Source: Deutsches Krebsforschungszentrum 2022<sup>7</sup>. Illustration: German Cancer Research Center, Cancer Prevention Unit, 2023

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