

# **CARDIOVASCULAR DISEASE RISK FACTORS AND SYMPTOMS AMONGST REGULAR PSYCHOSTIMULANT USERS**

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# EXECUTIVE SUMMARY

## Background

Psychostimulant use is a major public health issue, with an estimated 14 million cocaine users globally, and 15-16 million methamphetamine users. These drugs are associated with a range of serious harm, including premature death, toxicity, dependence, blood born viruses, and drug-induced psychosis. Two of the most serious sequelae, however, are cardiovascular and cerebrovascular complications, both of which occur regardless of route of administration. The study aimed to:

1. Determine the prevalence, and nature, of risk factors and cardiovascular disease symptoms amongst regular psychostimulant users; and
2. Determine the predictors of cardiovascular symptoms amongst regular psychostimulant users.

## Methods

All participants were weekly or more frequent users of psychostimulants. Participants were administered a structured interview that addressed demographics, drug use history, global physical health, and cardiovascular disease history and symptoms. Questions were asked about risk factors for cardiovascular disease (smoking, family history, diabetes, high blood pressure, high cholesterol), severity and frequency of symptoms of cardiovascular disease (chest pain, chronic shortness of breath, palpitations, dizziness/loss of consciousness, numbness/tingling in extremities, ankle oedema, chronic fatigue, claudication), and perceived associations between psychostimulant use and cardiovascular disease symptoms. Participants were also asked about treatment seeking for symptoms of cardiovascular disease.

## Results

### Risk factors for cardiovascular disease

Almost all (93%) were current tobacco smokers and 51% had hazardous or harmful drinking patterns. Nearly a third (30%) had a known family history of cardiovascular disease, with no gender difference. Over a third (37%) had sought treatment for possible symptoms of cardiovascular disease, 28% in the preceding 12 months, again with no gender differences. Fourteen percent had received prescribed medications for symptoms of cardiovascular problems, 12% in the preceding 12 months.

### Symptoms of cardiovascular disease

The most commonly reported lifetime symptoms of possible cardiovascular disease were: chronic shortness of breath (78%), chest pains (66%), dizziness or loss of consciousness (64%), palpitations (61%) and numbness or tingling in extremities (59%). The most

commonly reported severe symptoms were: chronic shortness of breath (17%), chest pains (15%), palpitations (14%), chronic fatigue (13%) and dizziness/loss of consciousness (11%). All symptoms occurred at significantly higher levels after the initiation of psychostimulant use. Symptoms that had occurred weekly over the preceding 12 months included: chronic shortness of breath (33%), chronic fatigue (21%), dizziness (18%), numbness/tingling in extremities (16%), palpitations (16%) and chest pains (13%). Independent predictors of higher levels of frequently occurring symptoms were higher SDS scores, higher AUDIT scores, a family history of cardiovascular disease, and a personal diagnosis of cardiovascular disease.

## **Conclusions**

This group of regular psychostimulant users had extensive risk for cardiovascular disease, and substantial proportions reported possible symptoms that appeared to be exacerbated by the use of psychostimulants. While a great deal of clinical attention has been given to sequelae of psychostimulant use such as blood borne virus infection and psychosis, the potential effects upon the cardiovascular systems of users are worthy of specific public health attention.