



# THE ALCOHOL, SMOKING AND SUBSTANCE INVOLVEMENT SCREENING TEST (ASSIST): GUIDELINES FOR USE IN PRIMARY CARE

Draft Version 1.1 for Field Testing



## **Caveat relating to use of this document**

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ROBERT ALI (AUSTRALIA)  
THOMAS BABOR (USA)  
MICHAEL FARRELL (UK)  
MARIA LUCIA FORMIGONI (BRAZIL)  
RACHEL HUMENIUK (AUSTRALIA)  
JAROON JITTIWUTIKARN (THAILAND)  
ROSELI BOERNGEN DE LACERDA (BRAZIL)  
WALTER LING (USA)  
JOHN MARSDEN (UK)  
JOSE MARTINEZ-RAGA (SPAIN)  
BONNIE MCREE (USA)  
MARISTELA MONTEIRO (WHO)  
DAVID NEWCOMBE (AUSTRALIA)  
HEMRAJ PAL (INDIA)  
VLADIMIR POZNYAK (WHO)  
SARA SIMON (USA)  
JANICE VENDETTI (USA)

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## **Opportunity for feedback**

We invite your comments and feedback. We are particularly interested in your experiences in using this document and its usefulness and relevance in your clinical, or other, setting.

If you have any feedback, comments, queries relating to this document please contact:

Dr Rachel Humeniuk  
Senior Project Manager  
World Health Organisation Collaborating Centre  
for Research in the Treatment of Drug and Alcohol Problems  
Department of Clinical & Experimental Pharmacology  
University of Adelaide  
South Australia 5005

+61-8-8303 8056 (Phone)  
+61-8-8303 8059 (Fax)  
Rachel.Humeniuk@adelaide.edu.au

Dr Vladimir Poznyak  
Management of Substance Dependence (MSB),  
Department of Mental Health & Substance Dependence (MSD)  
World Health Organization  
20 Avenue Appia  
1211 Geneva 27, Switzerland

+41-22-791 48 51 (Fax)  
poznyakv@who.int

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# 1. WHAT IS THE ASSIST?

The **ASSIST** is the **A**lcohol, **S**moking and **S**ubstance Involvement **S**creening **T**est. It is a brief screening questionnaire to find out about people's use of psychoactive substances. It was developed by the World Health Organisation (WHO) and an international team of substance use researchers as a simple method of screening for hazardous, harmful and dependent use of alcohol, tobacco and other psychoactive substances. The questionnaire covers:

- tobacco,
- alcohol,
- cannabis,
- cocaine,
- amphetamine type stimulants,
- sedatives,
- hallucinogens,
- inhalants,
- opioids, and
- other drugs.

The ASSIST is especially designed for use by health care workers in a range of health care settings. It may also be useful for professionals who work with people with high risk of problems related to substance use.

According to the World Health Organisation, primary health care is the first level of contact that individuals, the family and community have with their national health system and constitutes the first part of a continuing health care process. Primary health care relies on a range of different health workers, including physicians, nurses, midwives, social workers, psychologists, certain therapists, auxiliaries and community workers, as well as traditional practitioners, all who have been suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community.

The ASSIST provides information about:

- the substances people have ever used in their lifetime;
- the substances they have used in the past three months;
- problems related to substance use;
- risk of current or future harm;
- dependence;
- injecting drug use.

The ASSIST can help warn people that they may be at risk of developing problems related to their substance use in the future and it can provide an opportunity to start a discussion with a client about their substance use. It can identify substance use as a contributing factor to the presenting illness. The ASSIST can be linked to a brief intervention to help high risk substance users to cut down or stop their drug use and so avoid the harmful consequences of their substance use.

## 2. PURPOSE OF THE MANUAL.

The purpose of this manual is to introduce the ASSIST and to describe how to use it in primary health care settings to identify people with hazardous or harmful drug use. The manual will describe:

- Reasons to ask about alcohol and other drug use.
- The context of substance involvement screening.
- The development and validation of the ASSIST.
- How to use the ASSIST
  - When to use it.
  - Considering the patient.
  - Introducing the ASSIST to the patient.
  - Conducting the ASSIST interview.
  - Scoring and Interpretation.
- How to help patients who screen positive.
- How to use the ASSIST in every-day practice.

Additional information is included in the Appendices to the manual.

- Appendix A includes a copy of the ASSIST questionnaire.
- Appendix B includes a copy of the ASSIST Response Card for Patients.
- Appendix C includes a copy of the ASSIST Report Card for patients.
- Appendix D contains clinical information about some health risks associated with substance abuse including blood borne viruses and other problems related to injecting, psychosis and overdose.
- Appendix E provides information about how to adapt the ASSIST to your language and culture and to take account of the local situation

A companion document “Brief Intervention for Problematic Substance Abuse. A Manual for Use in Primary Care” explains how to link the ASSIST to a brief intervention to help clients reduce or stop their substance use.

### 3. RATIONALE FOR SCREENING FOR SUBSTANCE USE IN PRIMARY CARE.

Screening aims to detect health problems or risk factors at an early stage before they have caused serious disease or other problems. The WHO has identified a number of criteria for deciding which problems are suitable for screening (see Box 1 for a summary of these principles).

#### Box 1 Criteria for Screening

- The condition is a significant problem affecting the health and wellbeing of individuals and the community.
- There are acceptable treatments or interventions available for patients who screen positive.
- Early identification and intervention leads to better outcomes than later treatment.
- There is a suitable screening test available which is acceptable to patients.
- The screening test must be available at a reasonable cost.

Substance abuse meets all these criteria and screening for substance use problems can be seen as an extension of existing screening activities in primary health care.

There is evidence that the use of psychoactive substances is prevalent throughout the world and is associated with a significant public health burden. Tobacco, alcohol and illicit drugs are among the top 20 risk factors for ill-health identified by the World Health Organisation<sup>1</sup>. It is estimated that tobacco is responsible for 8.8% of all deaths and for 4.1% of the global burden of all disease, which is measured as the number of years spent living with a disease (disability adjusted life years - DALYs), while alcohol is responsible for 3.2% of deaths and 4.0% of DALYs. Illicit drugs are responsible for 0.4% of deaths and 0.8% of DALYs. Excessive alcohol use and other substance abuse are also risk factors for a wide variety of social, financial, legal and relationship problems for individuals and their families. Globally, there is an increasing trend for people to use multiple substances, either together or at different times, which is likely to further increase the risks.

People who inject drugs are at risk of infection with HIV and other blood borne viruses as a result of sharing of injecting equipment as well as sexual behaviour. Globally, between 5 and 10% of HIV infections result from injecting drug use. Injecting drug users infected with HIV can spread the infection to the general population through sexual contacts with people who are not drug users. Infected mothers can transmit the infection to their unborn children. Links between drug use and commercial sex work also contribute to the spread of HIV beyond the population of injecting drug users.

Primary health care workers have the opportunity to screen a broad range of people for general lifestyle issues as a routine part of their health care service. In developed countries up to 85% of people see a primary health care worker at least once per year and patients with problems related to psychoactive substance use are likely to have more frequent consultations. Screening at the primary care level may increase the likelihood of identifying individuals with a lower level of risky substance use who are more likely to respond well to an intervention.

Primary care has an important place in the health system which allows workers to provide a link to comprehensive, ongoing health care, and primary health care workers generally have the knowledge and skills to manage health promotion and illness prevention as well as treatment.

Primary health care workers are seen as a trusted and credible source of health information and may provide the first point of contact with groups which are at higher risk of harm from substance use. There is evidence that if primary health care workers inquire about substance use risk factors then patients are more willing to talk about substance use problems and to consider the possibility of changing their substance use behaviours. Primary care interventions based on motivational interviewing and cognitive behavioural interventions are effective for a range of lifestyle related problems including substance use.

The ASSIST is the first screening test which covers all psychoactive substances including alcohol, tobacco and illicit drugs, and can help practitioners identify patients who may have hazardous, harmful or dependent use of one or more substances.

- Hazardous use is a pattern of psychoactive substance use which increases the risk of harmful consequences for the user.
- Harmful use is a pattern of psychoactive substance use that is damaging to the physical and or mental health of the user.
- Dependence on alcohol or other drugs usually develops after repeated use and involves a cluster of symptoms which may include a strong desire to use the substance, impaired control over its use, persistent use of the substance even when it is causing harm, increased tolerance to the effects of the substance and a withdrawal reaction when use is stopped or reduced.

Hazardous, harmful or dependent use patterns of psychoactive substances can also cause significant social problems for the user, such as problems with family, friends, the law and finances.

## Problems related to substance use

Clinical staff should be aware that, in general, people use substances because they have pleasurable or desirable effects for the user. However, substance use problems can arise as a result of acute intoxication, regular use or dependence and from the way in which substances are used. It is possible for a person to have problems from all of these. Problems relating to acute intoxication can occur as a result of a single episode of drug use and may include:

- acute toxic effects including ataxia, vomiting, fever, confusion,
- overdose & loss of consciousness,
- accidents and injury,
- aggression and violence,
- unintended sex and unsafe sexual practices,
- reduced work performance.

A variety of different problems can occur from using substances regularly, ranging from physical problems to mental health and social problems. There is not always a clear distinction between these effects, and it is worth noting that mental health and social problems can be as debilitating as physical problems for some people. The kinds of problems relating to regular use and dependence develop over a period of time and may include:



- specific physical and mental health problems,
- decreased immunity to infection,
- anxiety and depression,
- sleep problems,
- withdrawal symptoms when use is reduced or stopped,
- financial difficulties,
- legal problems,
- relationship problems,
- work problems.

Withdrawal symptoms vary depending on the drug involved but generally include craving (strong desire for the psychoactive substance or its effects), anxiety, irritability, gastrointestinal upsets and problems sleeping. Symptoms are more severe for some drugs than others. Withdrawal from alcohol, benzodiazepines and opioids may require medical management while uncomplicated withdrawal from other drugs can usually be managed with supportive care.

Substance related problems can result from the way in which substances are used, for example, many of the harms associated with tobacco and cannabis occur because these substances are smoked and the smoke is harmful. Using substances by injection can cause serious health problems no matter which substance is injected (see below and Appendix D).

Use of illicit drugs places the user at particularly high risk of legal problems and the consequent social, financial and employment difficulties associated with having a criminal record. These problems cause stress which is also associated with an increased risk of health and family problems independently of the substances used.

## Specific health problems from individual substances

### *Tobacco*

- Use of tobacco products is the leading cause of drug related disease and death and is a major public health problem. Regular smoking of tobacco products is a risk factor for a number of serious long term health problems including:
  - heart disease, high blood pressure, stroke,
  - chronic obstructive airways disease (chronic bronchitis, asthma, emphysema),
  - cancers of the lung, bladder, breast, mouth, throat and oesophagus.
- Smoking increases the severity or risk of complications of other health problems such as:
  - high blood pressure,
  - diabetes,
  - asthma.
- Children of people who smoke tobacco products are at increased risk of a range of health problems such as:
  - respiratory infections,
  - allergies and asthma.

- Pregnant women who smoke are at higher risk of:
  - miscarriage,
  - premature labour,
  - having a low birth weight baby.
- Exposure to tobacco smoke in the environment (passive smoking) also increases the risk of these health problems among people who do not smoke themselves.
- Use of tobacco products by means other than smoking, such as chewing, or sniffing is also associated with increased risk of disease.
- Tobacco smoking is also associated with:
  - premature ageing and wrinkling of the skin,
  - bad breath,
  - unpleasant body odour.

### *Alcohol*

For some people, low level alcohol consumption is associated with health benefits, mainly due to a reduction in risk for heart disease from middle age onwards. The lowest risk is associated with an average of one standard drink per day for men and less than one drink per day for women. However, excessive alcohol consumption is a risk factor for a wide range of health and social problems and is a major cause of premature illness and death.

- Acute intoxication with alcohol is associated with:
  - aggressive and violent behaviour,
  - increased risk of accidents and injury,
  - nausea and vomiting,
  - hangovers (headaches, dehydration, nausea, etc.),
  - reduced sexual performance.
- Chronic excessive consumption can affect every part of the body and lead to long term health problems. High risk drinking is associated with:
  - high blood pressure and stroke,
  - anxiety, depression and suicide,
  - liver disease,
  - digestive problems, ulcers and inflammation of the pancreas,
  - blackouts and hallucinations,
  - difficulty remembering things and solving problems,
  - premature ageing,
  - impotence,
  - permanent brain injury leading to memory loss, cognitive deficits and disorientation,
  - impaired mobility as a result of osteoporosis, gout, and muscle and nerve damage,
  - cancer of the mouth, throat and breast.
- Tolerance and dependence may develop after chronic excessive use of alcohol and dependent drinkers may suffer withdrawal symptoms if they reduce or stop their alcohol consumption. Severe alcohol withdrawal complicated by delirium tremens is a medical emergency. Withdrawal symptoms include:
  - tremor,
  - sweating,
  - anxiety,
  - nausea, vomiting and diarrhoea,
  - insomnia,
  - headache,
  - hallucinations,
  - convulsions.

- Women who consume alcohol during pregnancy are at risk of having babies who suffer from foetal alcohol syndrome which is associated with deformities and impaired brain development.

### *Cannabis*

Worldwide, cannabis is the most widely consumed illicit drug. Toxicity of cannabis is low and there have never been any reports of deaths due to cannabis intoxication alone. However, cannabis use is associated with numerous negative health consequences.

- Acute intoxication with cannabis is associated with increased risk of:
  - anxiety,
  - dysphoria,
  - paranoia,
  - panic,
  - nausea,
  - impairment of attention and memory,
  - possible increased risk of accident and injury.
- People with a personal or family history of schizophrenia are at increased risk of experiencing psychosis as a result of cannabis use.
- Regular cannabis smoking shares many of the risks of tobacco smoking, increasing the risk of:
  - respiratory diseases,
  - lung cancer, upper respiratory and digestive cancers.
- Cannabis smoking also increases the severity and risk of complications of diseases such as:
  - high blood pressure,
  - heart disease,
  - asthma,
  - bronchitis,
  - emphysema.
- Regular use of cannabis can lead to:
  - decreased memory and problem solving ability,
  - loss of motivation,
  - reduced libido,
  - depression,
  - tolerance and dependence.
- Cannabis use in pregnancy has similar effects on mother and baby to tobacco smoking.

### *Cocaine*

- Cocaine use is associated with a wide range of physical and mental health problems. Most common physical problems include:
  - heart racing,
  - headaches,
  - weight loss,
  - numbness/tingling,
  - clammy skin,
  - repeated scratching or picking of skin,
  - increased risk of accidents and injury,
  - exhaustion and reduced immunity to infection.

- Mental health problems include:
  - difficulty sleeping,
  - intense craving,
  - paranoia,
  - anxiety,
  - depression,
  - exhilaration and mania,
  - aggression,
  - difficulty remembering things,
  - severe stress resulting from the lifestyle.
- Repeated use of high doses can lead to psychosis.
- There is a significant risk of toxic complications and sudden death. Death is usually due to cardiovascular effects.

Cocaine use is associated with risky behaviour including high risk injecting and unsafe sex putting users and their partners at significant risk of contracting a range of sexually transmitted diseases and blood borne viruses.

#### *Amphetamine Type Stimulants (ATS)*

Amphetamines (including dexamphetamine and methamphetamine) have similar effects to cocaine and can lead to a wide range of physical and mental health problems.

- Physical problems include:
  - difficulty sleeping,
  - loss of appetite and weight loss,
  - dehydration,
  - jaw clenching, headaches and muscle pain,
  - shortness of breath,
  - tremors and irregular heartbeat,
  - reduced resistance to infections,
  - sexual difficulties.
- Mental health problems associated with ATS use are a major area of concern and include:
  - psychosis after repeated use of high doses,
  - mood swings including anxiety, depression, exhilaration and mania,
  - agitation,
  - paranoia,
  - hallucinations,
  - aggressive and violent behaviour,
  - difficulty remembering things.
- Long term high dose methamphetamine use is a risk factor for malnutrition and may cause permanent damage to brain cells.
- There is also a high prevalence of social problems including:
  - relationship problems with partners, friends and family,
  - financial problems,
  - work and study related problems.
- Ecstasy (MDMA) is also an amphetamine type stimulant. Some of its effects are similar to other ATS but ecstasy is also associated with a range of very rare but life-threatening conditions including:

- hyperthermia (very high temperature),
  - disturbances of salt and water balance in the body,
  - liver damage,
  - brain haemorrhage.
- Ecstasy may also lead to ongoing mental health problems including:
    - difficulty remembering things,
    - depression,
    - panic disorders,
    - 'flashbacks' and delusions.
  - There is growing evidence that ecstasy is neurotoxic and causes damage to nerves in the brain.

### *Inhalants*

- Acute intoxication with inhalants can result in:
  - dizziness and hallucinations,
  - nausea,
  - drowsiness, disorientation, blurred vision,
  - loss of self control,
  - unconsciousness, delirium and fits,
  - accidents and injury,
  - death from heart failure.
- Chronic use is associated with:
  - extreme tiredness,
  - red, watery eyes, cough, runny nose, spots around the nose,
  - trembling, tremor and slowed reactions,
  - damage to the heart, lungs, liver and kidneys,
  - chronic headaches, sinus problems and nosebleeds,
  - indigestion and stomach ulcers,
  - memory loss and confusion,
  - depression and aggression.

### *Sedatives/sleeping pills*

- Use of sedatives and sleeping pills may be associated with:
  - drowsiness, dizziness and confusion,
  - unsteady way of walking and falls,
  - depression,
  - sleeping problems,
  - headaches,
  - skin rash,
  - nausea.
- Tolerance and dependence on sedatives or sleeping pills can develop after a short period of use. Withdrawal symptoms include:
  - severe anxiety and panic,
  - insomnia,
  - headache,
  - sweating and fever,
  - nausea and vomiting,
  - convulsions.

- If sedatives are used with other depressant drugs such as opioids or alcohol they can increase the effects of those drugs which increases the risk of overdose and death.

### *Hallucinogens*

- Effects of hallucinogens are unpredictable and may be different for different users or on different occasions. They may cause:
  - hallucinations which may be pleasant or unpleasant,
  - difficulty sleeping,
  - mood swings, anxiety, panic, paranoia or exhilaration,
  - numbness, muscle weakness, twitching, tremor or seizures,
  - increased heart rate and blood pressure,
  - changes in temperature and sweating,
  - nausea and vomiting.
- In the long term, use of hallucinogens may increase the effects of mental illness such as schizophrenia. Users may also experience flashbacks – spontaneous recurrences of the effects of hallucinogens use in the past.

### *Opioids*

- Opioids slow down the central nervous system and reduce pain. Short term effects include:
  - nausea and vomiting,
  - shallow breathing,
  - drowsiness,
  - constipation,
  - itching.
- Long term effects may include:
  - tooth decay,
  - severe constipation,
  - irregular menstrual periods,
  - impotence and reduced libido.
- Opioid overdose occurs when the amount of opioids or other depressant drugs leads to respiratory depression and the person can slip into a coma and die. The risk of overdose is greatly increased if they have also used alcohol or sedatives.
- Regular heroin users may develop tolerance and dependence and suffer withdrawal symptoms when they stop using opioids or cut down the amount. Withdrawal symptoms can make the person feel very ill and include:
  - sweating, goose-bumps,
  - yawning, runny nose and tears,
  - diarrhoea, vomiting and stomach cramps,
  - restlessness, leg cramps and muscle pain,
  - high blood pressure and rapid pulse,
  - racing thoughts.
- There is also a high prevalence of social problems including:
  - relationship problems with partners, friends and family,
  - work and study related problems.

## Risks of Injecting

Injecting of any drug is a significant risk factor for contracting blood borne diseases such as HIV/AIDS and Hepatitis B and C. Injectors are also at risk of infection and damage to the skin and veins as a result of poor injection technique, repeated injections, and dirty equipment. People who inject drugs have a higher risk of dependence and are likely to have more severe dependence than those who do not inject.

Injecting of stimulant drugs such as amphetamines and cocaine increases the risk of drug related psychosis. Vein problems are very common among people who inject cocaine because cocaine causes numbness and makes the veins smaller. This makes it very difficult to inject correctly and increases the risk of subcutaneous injection (injecting just under the skin), abscesses and cellulitis.

## Benefits of screening for substance use

Screening for problematic substance use provides an opportunity for education about the risks of substance use and can be used as a health promotion strategy to encourage communities, groups and individuals to reduce the risks associated with their substance use behaviours. Screening can improve the health of populations and of individuals.

For those people whose substance use is not risky or harmful, screening can be used to reinforce that what they are doing is responsible and encourage them to continue their current low risk substance use patterns.

Screening is most effective for those found to be at risk when it is combined with a brief intervention. There is strong evidence for the effectiveness of screening and early intervention in reducing excessive alcohol use and growing evidence for the effectiveness of brief intervention for other forms of high risk substance use.

At the population level, screening and brief intervention is a cost effective method to reduce the burden of disease due to substance use. World Health Organisation estimates suggest that a 25% reduction in alcohol consumption world wide would lead to a 33% reduction in disease burden due to alcohol, while the benefits of reducing tobacco consumption would be even greater.

Screening for hazardous or harmful substance use can also help in the management of individual patients. Many common health problems seen in primary care may be related to substance use or may be made worse by substance use. Screening provides important information for the primary health care worker that can help in the diagnosis and treatment of the patient's health problems. Psychoactive substances can interact with medicines prescribed by the health worker to cause health problems and so information about substance use is very important for safe treatment.

## 4. CONTEXT OF SCREENING.

The ASSIST has been specifically designed for use in primary health care settings to help practitioners identify patients who would benefit from cutting down or stopping their substance use. Primary health care settings are ideal places to undertake screening and prevention activities for a number of reasons.

- Primary health care settings are generally the first contact with the health system for people seeking care and most people attend a general practice or other primary health care facility at least once per year.
- There is evidence that the rate of alcohol problems is higher among people seeking health care and this may also be true for some other substances such as amphetamines.
- Primary health care workers are a trusted and credible source of information and advice about health matters, and most people expect them to ask about lifestyle risk factors such as psychoactive substance use, especially if they are related to the presenting complaint.
- Many common health problems seen in primary health care settings may be made worse by psychoactive substance use, and screening provides an opportunity to educate patients about the risks of excessive alcohol or other substance use.
- There is an opportunity for repeated contact and the development of an ongoing relationship with patients which enables primary care workers to monitor progress and provide ongoing support.

For most people, the ASSIST can be completed in about five or ten minutes and can be incorporated into the normal consultation. Alternatively, it may be administered by another staff member while the patient is waiting to see the health worker. In the future, it is likely that the patient will be able to complete the ASSIST alone but it has not yet been validated for self completion.

### Using the ASSIST in other settings

While this manual is primarily focussed on using the ASSIST to screen for substance abuse in primary care settings, the ASSIST can also be used in many other contexts and with other target groups where substance use may be an important issue. This might include general hospital patients, especially those whose illness is known to be associated with substance abuse, patients attending emergency departments, psychiatric patients, particularly those who are depressed or suicidal, prisoners and those charged with drug and alcohol related offences, and any other groups considered to be at high risk of substance related problems.

Information about possible settings, target groups and personnel for a screening programme using the ASSIST is shown in Box 2.



**Box 2: Settings, groups and personnel suitable for an ASSIST screening programmes**

<u>Setting</u>	<u>Target Group</u>	<u>Screening Personnel</u>
Primary Care Clinic	Medical Patients	Nurse, social worker community health worker
Emergency department	Accident victims Intoxicated patients Trauma patients Medical Patients	Physician, nurse, other staff
Doctors Rooms Surgery	Medical Patients	General Practitioner Physician, other staff
General hospital wards Outpatient clinics	Patients with disorders possibly related to substance use	Physician, nurse, other staff
Psychiatric clinic Psychiatric hospital	Psychiatric patients particularly those who are suicidal	Psychiatrist, nurse other staff
Antenatal clinic Postnatal ward	Pregnant women New mothers	Midwife, General Practitioner, Obstetrician
Court, jail, prison	Offenders	Officers, counsellors Corrections health workers
Other health / welfare Facilities	People with impaired social or occupational Functioning	Health and welfare workers

## 5. DEVELOPMENT AND VALIDATION OF THE ASSIST.

### History of the project

The development of the ASSIST builds on previous work by the WHO to advance alcohol screening and brief intervention through the development and validation of the Alcohol Use Disorders Identification Test (AUDIT). The success of the AUDIT project in promoting alcohol screening and brief intervention and its effectiveness in reducing alcohol related problems provided the impetus for the extension of screening and brief intervention to other substance abuse problems and the methods used provided a model for the ASSIST project. Like the AUDIT, the ASSIST was designed specifically for international use in primary care settings and to identify:

- those whose patterns of substance use put them at risk of problems,
- those who have already developed problems related to their substance use,
- those at risk of developing dependence.

Phase I of the WHO ASSIST project was conducted in 1997 and 1998. It involved the development of a preliminary screening questionnaire for psychoactive substance use (the ASSIST Version 1.0). The draft questionnaire had 12 items. The reliability of the questionnaire items was assessed in a test – retest reliability study which was carried out at ten sites in Australia, Brazil, India, Ireland, Israel, the Palestinian Territories, Puerto Rico, the United Kingdom and Zimbabwe. The sites were chosen to ensure that study participants would be culturally diverse and have different substance abuse patterns. The ASSIST was revised to an 8 item questionnaire (Version 2.0) on the basis of feedback from the study participants to ensure that all items were easy to administer and understand.

In Phase II, an international study to validate the ASSIST questionnaire in a variety of primary health care and drug treatment settings was conducted. The study took place during 2000-2002 and was carried out at seven sites in Australia, Brazil, India, Thailand, the United Kingdom, the United States of America and Zimbabwe. Subjects were recruited from both primary care and alcohol and drug treatment services to ensure that individuals with different substance use patterns were adequately represented. The study involved a quantitative analysis of the concurrent validity, construct validity, predictive validity and discriminant validity of the ASSIST.

The Phase II study also included a pilot test of the effectiveness of a brief intervention with those subjects who scored positive on the ASSIST. Preliminary analysis found that the brief intervention was associated with a significant decrease in ASSIST scores at 3 month follow up. Feedback from participants receiving the brief intervention indicated that it was acceptable and effective, with 64% of participants reporting that the brief intervention had positively influenced their health behaviour. Of these, 57% reported that they had reduced their drug use and 34% reported that the intervention had raised their awareness of drug use and safety issues.

### Reliability

Test – retest reliability of the items on the ASSIST was measured in the Phase I study. Two hundred and thirty six people completed both the test and retest interviews. Sixty percent of the sample were recruited from alcohol and drug abuse treatment programs with the remainder recruited from primary health care settings. The sample was fairly typical of other samples of drug users with 63% males, 34% married or cohabiting, and 61% unemployed. Mean age was 34 years and subjects had completed an average of ten years of education.

Test - retest Kappa coefficients of agreement (K-values) were calculated for each question stem and drug category. K-levels ranged from 0.58 to 0.90 for question stems and from 0.61 (sedatives) to 0.78 (opioids) for substance categories. K-levels greater than 0.4 are considered moderate, while levels above 0.6 are considered substantial. Test - retest reliability of the ASSIST questions is, therefore, substantial.

## Validity

The validity of the revised ASSIST was assessed in the Phase II study which involved 1,047 participants. The average age of participants was 30.4 years and 66% were male. Specific Drug Involvement scores for each substance were calculated by adding the response scores to questions 2-7 for each drug category while Global Continuum of Risk or Total Substance Involvement was calculated by adding response scores for questions 1-8 across all ten drug classes.

The results of the Phase II study suggest that the ASSIST provides a valid measure of substance related risk both for individual substances and total substance involvement. Scores on the ASSIST were significantly correlated with other measures of problematic substance use including the MINI-Plus ( $r=0.76$ ,  $p<0.01$ ) and the Addiction Severity Index ( $r=0.84$ ,  $p<0.01$ ). Discriminative analysis found that the ASSIST could distinguish between three main groups of people:

- those who were low risk substance users or abstainers,
- those whose patterns of substance use put them at risk of problems, or had already developed problems related to their substance use, or were at risk of developing dependence,
- those who were dependent on a substance.

The study was conducted with both males and females and in seven different cultures to ensure that the ASSIST was equally appropriate for both males and females and is valid for cross-cultural use. The strong overall results in the reliability and validity studies suggest that the ASSIST is a valid screening test for international use.

## What does it include?

The revised ASSIST questionnaire consists of eight questions (ASSIST Version 2.1). Questions one to seven ask about use and problems related to tobacco, alcohol, cannabis, cocaine, ATS, inhalants, sedatives or sleeping pills, hallucinogens, and opioids. Any additional substances not included in this list can be specified under the 'other' category.

- Question 1 asks about which substances have ever been used in the patient's lifetime.
- Question 2 asks about the frequency of substance use in the past three months, which gives an indication of the substances which are most relevant to current health status.
- Question 3 asks about the frequency of experiencing strong desire or urge to use each substance in the last three months.
- Question 4 asks about the frequency of health, social, legal or financial problems related to substance use in the last three months.
- Question 5 asks about the frequency with which use of each substance has interfered with role responsibilities in the past three months.
- Question 6 refers to substances ever used and asks whether anyone has ever expressed concern about the patient's use of each substance and how recently that occurred.

- Question 7 asks whether the patient has ever tried and failed to cut down or give up their use of each substance and how recently that occurred.

Taken together these questions provide indications of hazardous and harmful substance use, and dependence. Scores in the mid range on the ASSIST are likely to indicate hazardous or harmful substance use. Substance dependence is particularly indicated by trying and failing to cut down and compulsion to use, and those who have high scores on the ASSIST are likely to be dependent and at high risk of substance related harm.

Question 8 is focussed on injecting and asks whether the patient has ever injected any drug. Injection is treated separately because it is a particularly high risk activity associated with increased risk of dependence, blood borne viruses such as HIV and hepatitis C and with higher levels of other drug related problems.

## 6. HOW TO USE THE ASSIST.

### When to use the ASSIST

The ASSIST can be used in a number of ways to assess patients' substance use. Ideally, all patients should be screened annually for substance use as part of a health promotion screening programme. This is particularly important for primary care settings where a high proportion of patients are likely to be substance users, e.g., university health services, sexually transmitted disease clinics, "red light" districts and primary health services in other locations with a high prevalence of substance abuse (see Box 3). If health workers screen only those they think are likely to have a substance use problem, they will probably miss a significant proportion of patients with hazardous and harmful substance use. Guidelines for how to set up a screening programme in your practice are presented later in this manual on page 26.

Substance use generally commences during adolescence and so it is not necessary to screen children below this age. Adolescence can be seen as a critical milestone for substance use problems and an appropriate time to commence screening young patients. The exact age at which it is appropriate to commence regular screening for substance use problems will vary from place to place depending on local prevalence and patterns of use. You will need to be aware of the legal age of consent in your country and the legal requirements relating to screening and intervention with adolescents who are under this age.

#### Box 3: Who to screen

- Ideally, all patients in a health promotion screening programme commencing in adolescence.
- Primary care settings likely to have a high proportion of substance users – university health services, STD clinics, red light districts, areas with high prevalence.
- Patients whose presenting complaint suggests it is/may be related to substance use.
- Patients whose condition would be adversely affected by substance use.
- Pregnant women.

## Considering the patient

The ASSIST can be administered on its own or combined with other questions as part of a general health interview, a lifestyle questionnaire or as a part of the medical history. Patients are most likely to consent to screening and give accurate answers to questions about substance use when the health worker:

- shows that they are listening to the patient,
- is friendly and non-judgemental,
- shows sensitivity and empathy towards the patient,
- provides information about screening,
- carefully explains the reasons for asking about substance use,
- gives assurances that the patient's responses will be confidential.

It may be helpful to explain that screening for substance abuse is similar to other screening activities such as blood pressure measurement, or asking about diet and exercise. Linking the screening to the presenting complaint where it is relevant, may help patients to see the connection between their substance use and their health and make them more receptive to screening with the ASSIST.

It is especially important when asking questions about use of substances which may be illegal to assure the patient that their answers will be strictly confidential and will not be given to anyone else.

Health workers need to choose the best circumstances for administering the ASSIST and be flexible and sensitive to patient needs. If patients require emergency treatment or are distressed or in pain, it is best to wait until their medical condition has stabilised and they are feeling comfortable before administering the ASSIST. Use your clinical judgement to determine the best time to discuss the ASSIST with each patient (see Box 4).

Patients who are intoxicated may be incapable of giving reliable responses and screening should be considered at a later time. It may be appropriate to make another appointment specifically to administer the ASSIST and discuss substance use.

### **Box 4: When to delay screening**

- If the patient is intoxicated
- If the patient needs emergency treatment
- If the patient is distressed or in pain

### *Privacy and Confidentiality*

Protecting the privacy of patients and the confidentiality of the information that patients provide is critical. This is especially important when you are collecting information relating to substance use. The use of psychoactive substances is a criminal offence, or at least illegal, in most countries. There is also potential for stigmatisation and discrimination against those who are identified as substance users. Any personal information collected from patients must not be revealed to any individual or group of individuals without the patient's direct consent. Assuring patients that the information they give will be confidential will also help them to provide accurate information about their substance use.

## Introducing the ASSIST to the patient

The ASSIST should be introduced carefully with a brief explanation of the reasons for asking and instructions for responding. The ASSIST questionnaire comes with a card which includes sample instructions on one side and a list of the drugs covered by the questionnaire on the other (the drug card). The following is an example introduction which can be used as it is or modified to suit local circumstances.

*"Many drugs and medications can affect your health. It is important for your health care provider to have accurate information about your use of various substances, in order to provide the best possible care. The following questions ask about your use of alcohol, tobacco products and other drugs. These substances can be smoked, swallowed, snorted, inhaled, injected or taken in the form of pills. (Show the patient the drug card). Some of the substances listed may be prescribed by a doctor (like amphetamines, sedatives, pain medications). For this interview, we will **not** record medications that are used **as prescribed** by your doctor. However, if you have taken such medications for reasons other than prescription, or taken them more frequently or at higher doses than prescribed, please let me know. While we are also interested in knowing about your use of various illicit drugs; please be assured that information on such use will be treated as strictly confidential."*

For patients whose drug use is prohibited by law, culture or religion it may be necessary to acknowledge the prohibition and encourage honest responses about actual behaviour. For example:

*"I understand that others may think you should not use alcohol or other drugs at all but it is important in assessing your health to know what you actually do."*

### *The Response Card for Patients*

During the introduction and instructions for the ASSIST the health worker should clarify which substances are to be covered in the interview and ensure that they are referred to by names which are familiar to the patient.

The Response Card for Patients contains a list of the substance categories covered by the ASSIST together with a range of names associated with each category. It also contains frequency responses for each question. The drug names on the card are those which are most commonly used in the countries in which the ASSIST was tested, but the interviewer should use the most culturally appropriate names for their location. Check with patients what names they use to describe particular drugs and use the names that they use (See Appendix B).

### *Interview versus self administration*

Currently the ASSIST is only validated for use in an interview. Further research is needed to determine if it is suitable for self administration.

The interview format has a number of advantages. The ASSIST can be used even when patients have low levels of literacy. The health worker can explain questions which are poorly understood and can ask probing questions to clarify inconsistent or incomplete responses. The ASSIST can be administered as a normal part of the consultation. Confidentiality is assured by conducting the interview in a private place and by keeping the ASSIST results as part of the confidential patient record.

However, a few patients may be uncomfortable revealing their substance use directly to a health worker and may be more likely to under-report their drug use in an interview than if they are able to complete the questionnaire by themselves. While there are currently no

data to confirm this, there is no reason to suspect that self administration of the ASSIST would be less reliable or less valid than interview.

## Administration of the ASSIST

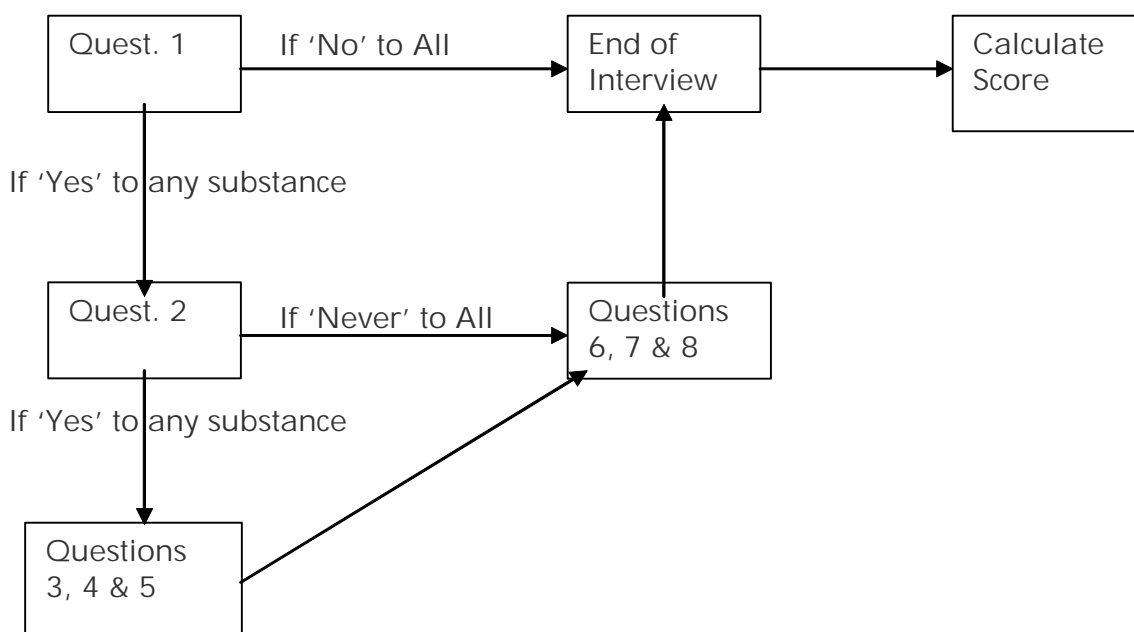
The ASSIST questionnaire contains some prompts and instructions to guide interviewers during the interview. Some of these instructions enable the interviewer to leave out some questions for some patients and so shorten the interview. Others remind the interviewer to probe for more detail to obtain accurate responses. While some flexibility is possible when asking the questions, it is important to make sure that all the relevant questions have been asked and that the answers have been recorded.

Question 1 asks about lifetime use of substances, i.e., those drugs the patient has ever used, even if it is only once. Every patient should be asked this question for all the substances listed. If the patient answers 'No' to every substance the interviewer should ask a probing question "Not even when you were in school?". If the response is still 'No' to all the substances then the interview should be stopped.

If the patient answers 'Yes' to Question 1 for any of the substances listed then move on to Question 2 which asks about substance use in the previous three months. Question 2 should be asked for each of the substances ever used. If the response is 'Never' to all of the items in Question 2, move on to Question 6. If any substances have been used in the past three months then continue with Questions 3, 4 and 5 for each substance used. It should be noted that Q5 is not asked for tobacco because it is unlikely that failure to fulfil role obligations would be experienced by tobacco users.

All patients reporting ever having used any substance in their lifetime in Question 1 should be asked Questions 6, 7 and 8. Questions 6 and 7 should be asked for each substance endorsed in Question 1.

**Figure 1: Administering the ASSIST**



## Scoring and Interpretation

Each question on the ASSIST has a set of responses to choose from, and each response has a numerical score. The interviewer simply circles the numerical score that corresponds to the patient's response for each question. At the end of the interview these scores are added together to produce an ASSIST score.

A number of different scores can be calculated for the ASSIST.

- **Specific Substance Involvement** score  
sum of responses to Questions 2-7 within each drug class
- **Total Substance Involvement** score (global continuum of risk)  
sum of responses to Questions 1-8 for all ten drug classes

The most useful score for screening and clinical purposes is the **Specific Substance Involvement** score for each drug class. This provides a measure of use and problems over the three months prior to the interview for each substance covered by the ASSIST and warns of the risk of future substance related problems. Each patient may have up to 10 Specific Substance Involvement scores depending on how many different types of substance they have used.

The Specific Substance Involvement score is calculated by adding together the responses to Questions 2-7 for each of the following drug classes: tobacco, alcohol, cannabis, cocaine, amphetamine type stimulants, inhalants, sedatives/sleeping pills, hallucinogens, opioids and 'other drugs' (see Box 5 for an example).

<b>Box 5: Example</b>		
<b>Calculating a Specific Substance Involvement Score for Cannabis</b>		
A patient has given the following answers on the ASSIST for Cannabis		
Q2c	Weekly	Score = 4
Q3c	Once/twice	Score = 3
Q4c	Monthly	Score = 5
Q5c	Once/twice	Score = 5
Q6c	Yes, but not in past 3 months	Score = 3
Q7c	No, Never	Score = 0
Specific Substance Involvement Score (Cannabis)		<b>Total = 20</b>
(similar scores are calculated for all other substances used in the past 3 months with the exception of tobacco which does not include Q5 in the calculation)		

The score for each substance should then be recorded on the ASSIST report card (see below) and noted in the patient record.

*What do the scores mean?*

<b>Box 6: What do the Specific Substance Involvement Scores Mean?</b>			
<b>Alcohol</b>		<b>All other substances</b>	
0-10	Low Risk	0-3	Low Risk
11-26	Moderate Risk	4-26	Moderate Risk
27+	High Risk	27+	High Risk



Patients with ASSIST Specific Substance Involvement scores three or less (10 for alcohol) are at a lower risk of problems related to the use of the substance involved. While they may use substances occasionally, they are not currently experiencing any problems related to their use and are at low risk of developing health problems related to their substance use in the future if they continue their current pattern of use.

Mid range scores between 4 (11 for alcohol) and 26 for any substance are an indication of hazardous or harmful use of that substance. Patients with scores in this range are at moderate risk of harm from their current pattern of substance use. Risk is increased for those with a past history of problems or dependence.

A score of 27 or higher for any substance suggests that the patient is at high risk of dependence on that substance and is probably experiencing health, social, financial, legal and relationship problems as a result of their substance abuse.

Question 8 on the ASSIST asks about the recency of injection of substances. While the score from question 8 is not included in the calculation of the ASSIST Specific Substance Involvement score, injection of any substance in the last 3 months (a score of '2' on Q8) is a risk factor and these patients should be assessed further for their risk levels and pattern of injecting in the last three months.

Patients who are injecting more than once a week, or have injected drugs three or more consecutive days in a row are at very high risk of harms, including dependence, infection and blood borne virus contraction, and will require more intensive treatment. Patients injecting less frequently than this are at a reduced risk, and may be given a brief intervention.

These are guidelines for the most appropriate treatment based on risk and are based on patterns of injecting use that would reflect moving towards dependent use for heroin users (more than weekly) and amphetamine/cocaine users (more than three consecutive days in a row). However, health professionals will have to make a clinical judgment about the best course of action based on the information they have available to them at the time.

While the ASSIST provides an indication of the degree of substance-related risk, it is worth noting that there are limitations of making risk assessments based only on the ASSIST, as there are with any kind of psychometric tool. Substance-related problems are multi-faceted, and there are many factors which modify the risk of health consequences of substance use including family history of substance use problems, psychiatric comorbidity, age, gender, socio-economic status etc. Health care practitioners should keep these factors in mind when estimating the actual individual risk for each patient.

#### *The ASSIST Feedback Report Card*

The ASSIST Feedback Report Card is completed at the end of the ASSIST interview and is used to provide personalised feedback to the patient about their level of substance related risk. The report card is a four page folder with space to insert scores on the front page and information about risk level and potential problems for each substance on the remaining pages. A formatted copy of the report card appears in Appendix C.

Record the Specific Substance Involvement Scores for each substance in the boxes provided on the front of the card. On the other pages record the level of risk indicated by the specific substance involvement score for all substances used in the past three months by ticking the relevant box.

The report card is used during the consultation to provide feedback and is given to the patient to take home as a reminder of what has been discussed.

### *The Risks of Injecting - Information for Patients*

The risk of injecting card is a one page sheet that provides information and personalised feedback to individuals who are injecting drugs about the risks and problems associated with injecting. The card is used during the brief intervention to provide advice and information, and is given to the patient to take home as a reminder of what has been discussed.

## 7. HOW TO HELP PATIENTS.

All patients screened using the ASSIST should receive feedback regarding their scores and level of risk and be offered information about the substances they use. This is the minimum level of intervention for all patients. Box 7 links ASSIST scores with the most appropriate level of intervention. For patients whose ASSIST score indicates that they are at low risk of substance related harm for all substances this level of intervention is sufficient. Patients who are at low risk or abstainers should be congratulated and encouraged to remain that way.

Patients whose ASSIST score indicates that they are at moderate risk of harm (Specific Substance Involvement score between 11 and 26 for alcohol, and 4 and 26 for other substances) should be offered a brief intervention. People who are injecting less than once a week, and have not injected drugs three or more times in a row during the last three months also could be given a brief intervention by the health professional including the "*Risks of Injecting*" card. A brief intervention suitable for use with these patients is described in detail in the companion document "*Brief Intervention for Problematic Substance Use. A Manual for Use in Primary Care.*"

Patients whose Specific Substance Involvement score is 27 or more for any substance, and/or have regularly injected drugs in the last 3 months are likely to be at high risk and substance dependent and require more than just a brief intervention. These people require further assessment and more intensive treatment. This may be provided by the health professional(s) within that primary care setting, or, by a specialist drug and alcohol treatment service if these agencies exist and are accessible for the patient within a reasonable period of time.

If specialist treatment agencies exist, clinic staff should be aware of the waiting lists and the procedures involved in making appointments, and referring high risk patients to specialist agencies. If drug treatment facilities are not easily accessible or heavily stigmatised, every effort should be made to treat the patient within the clinic.

More detailed information about how to help patients following screening with the ASSIST can be found in the companion document "*Brief Intervention for Problematic Substance Use. A Manual for Use in Primary Care.*" Patients receiving a brief intervention should also be given "*The substance users guide to cutting down or stopping*" booklet and specific drug information to take home with them.

## Box 7: Linking ASSIST Scores to Appropriate Interventions

### Tobacco

SSI Scores 0-3 →→ information  
SSI Scores 4-26 →→ brief intervention  
SSI Scores 27+ →→ more intensive treatment<sup>#</sup>

### Alcohol

SSI Scores 0-10 →→ information  
SSI Scores 11-26 →→ brief intervention  
SSI Scores 27+ →→ more intensive treatment<sup>#</sup>

### Other Substances

SSI Scores 0-3 →→ information  
SSI Scores 4-26 →→ brief intervention  
SSI Scores 27+ →→ more intensive treatment<sup>#</sup>

### Recent injecting drug use Q8

Score 1 for Q8 →→ information  
Score 2 for question 8 (infrequent use\*) →→ brief intervention  
Score 2 for question 8 (frequent use\*) →→ more intensive treatment<sup>#</sup>

*NB: SSI = Specific Substance Involvement*

*<sup>#</sup> Further assessment and more intensive treatment may be provided by the health care professional(s) within your health care setting, or, by specialist drug and alcohol treatment service when available.*

*\*In general, frequent injecting use refers to injecting drugs more than once per week, or three or more days in a row, in the last three months.*

## 8. HOW TO INCLUDE SCREENING WITH THE ASSIST IN EVERY DAY PRACTICE.

Screening activities such as blood pressure measurement, 'pap' smears, cholesterol measurement, and monitoring of children's height and weight are already a part of every day practice in many primary health care settings. Screening for problems related to substance use and appropriate patient care has also been widely recognised as an important part of good primary health care practice.

Implementing a screening programme in your practice requires a commitment from management and staff and involves four main aspects.

- Planning
- Training
- Monitoring
- Feedback

## Planning

Planning is needed to design the screening programme and make sure that the processes fit into the special circumstances of each primary care practice. Ideally all staff of the primary health care practice should be involved in planning for the programme. Staff who are involved in planning are more likely to understand the reasons for the programme, feel a sense of ownership and enthusiasm for its implementation, understand their roles in the programme and be committed to making it work. Staff from different backgrounds and with different roles and experience will be able to work together to identify any possible difficulties and create ways to overcome them.

It may be helpful to appoint one member of staff as the ASSIST Co-ordinator. This person can be responsible for making sure that all staff understand their roles and responsibilities and that all of the necessary tasks are carried out.

The plan should be clear and address all of the issues involved in implementing an ASSIST screening programme in a particular practice. Some of the questions which need to be addressed are listed in the Box 8.

### Box 8: Implementation Questions

- Which patients will be screened?
- How will patients needing screening be identified?
- How often will patients be screened?
- Who will administer the ASSIST?
- When during the patient's visit will the ASSIST be administered?
- Who will interpret the results and help the patient?
- What follow-up actions will be taken?
- How will records of screening and follow-up actions be kept?
- How will copies of the ASSIST and information materials be obtained, stored and managed?
- How will follow-up be scheduled?
- How will you inform patients of the ASSIST screening programme?
- Which staff will be involved in the programme? What will be their roles?
- What resources and processes do you have in the practice which will help you manage the screening programme?

The plan should be comprehensive and ensure that screening is timely, systematic and efficient but should also be flexible so that health workers can also make the most of unexpected opportunities for screening with the ASSIST.

There is strong evidence for the effectiveness of a number of strategies for implementing prevention and screening programmes in primary care. These strategies include:

- Using the waiting room to cue patients to think about their substance use by providing:
  - Posters and displays about substance related risks and problems
  - A well organised notice board containing information about the programme
  - Practice newsletters
  - Relevant information leaflets and patient education material.

- Including health summary sheets in the patient record to provide a summary of:
  - Particular health needs
  - Whether the patient has been screened using the ASSIST
  - Their ASSIST scores and risk status
  - What interventions have been undertaken
  - When they are next due to be screened.
- Placing stickers on the patient record to indicate at a glance whether patients have been screened and when screening took place.
- Implementing reminder systems. Reminders can be used to:
  - Invite patients to take part in the screening programme
  - Prompt the health worker to administer the ASSIST during the patient visit
  - Invite the patient for follow-up if needed (recall)
  - Remind health workers and patients when repeated screening is due.

If the resources are available, computerised information systems can be of great assistance in managing a screening programme.

## Training

Training of all staff involved in the screening programme is essential for the programme to be effective. Training should include:

- Why the screening programme is important
- Implementation procedures to be used
- The roles and functions of staff in the screening programme and how it fits with their other work
- How to administer the ASSIST
- How to calculate ASSIST scores
- How to conduct follow-up activities to help patients at different levels of risk.

Follow-up activities are based on the patients' level of risk and include feedback, advice and brief intervention for those at low to moderate risk (See the companion manual entitled "*Brief Intervention for Problematic Substance Use: A Manual for Use in Primary Care*"). Patients who are at high risk require more intensive treatment than a brief intervention. This can be managed by the staff within your health agency or at specialist drug and alcohol treatment agencies. Staff should be aware of the waiting lists and the procedures involved in making appointments, and referring high risk patients to these specialist agencies. If drug treatment facilities are not easily accessible or heavily stigmatised, the patient should be considered for another appointment for a diagnostic evaluation and more intensive treatment, such as pharmacotherapy or extensive counselling.

Effective training should enable staff to openly discuss their roles and functions and their attitudes to screening and early intervention for hazardous and harmful substance use. It should also provide opportunities for role play and supervised practice in administering the ASSIST and carrying out follow-up activities.

## Monitoring

Regular monitoring of the ASSIST screening programme is important to ensure that any implementation problems are addressed as they arise and to measure the success of the programme. There are a number of ways of measuring the success of a screening programme.

- The number of patients who have been screened can be compared to the number of patients who are eligible to be screened under the programme policy. This can be calculated as a percentage of screening success.
- The percentage of screened patients whose ASSIST scores indicate that they are at moderate or high risk can be calculated for each substance.
- The proportion of patients who receive the appropriate intervention for their ASSIST scores (feedback and information, brief intervention, more intensive treatment) can be calculated.
- If resources are available, it is possible to carry out a more rigorous evaluation of programme outcomes by carrying out a follow up survey. Select a small sample of patients who were screened 6 or 12 months previously and whose ASSIST scores indicated moderate or high risk for substance related problems. Survey them about changes in their substance use behaviours as a result of the programme. The ASSIST can be readministered to provide a quantitative measure of outcomes.

### *Record keeping*

Monitoring activities cannot be carried out unless there are good patient and programme records. It is important to make sure that details of screening and follow up interventions are recorded in the patient record. This can be done using special stickers or health summary sheets. It is also helpful if the primary care practice has a central register of patients and screening programme activities. The ASSIST Co-ordinator should be responsible for making sure that appropriate records are kept.

## **Feedback**

Frequent feedback of monitoring results to all participating staff is essential for on-going improvement to the programme. Feedback also helps to maintain staff commitment to the programme.

Feedback from staff is also important as it provides information about how the implementation processes are working and enables problems to be identified and solutions developed.

Written reports and regular discussions about the ASSIST screening programme at staff meetings will provide opportunities for feedback to be given and acted upon.

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## 10. GUIDE TO APPENDICES.

The attached appendices contain both clinician and patient materials. These can be photocopied where necessary.

### **Appendix A. The Alcohol, Smoking and Substance Involvement Screening Test questionnaire (ASSIST V3.0)**

The ASSIST questionnaire can be photocopied for repeated use in primary care and other treatment settings.

### **Appendix B. ASSIST V3.0 Response Card for Patients**

This is a one page document which should be given to patients in order to aid ease of responding. The response card can be photocopied.

### **Appendix C. Alcohol, Smoking and Substance Involvement Screening Test (ASSIST V3.0) Feedback REPORT CARD for Patients**

The Feedback Report Card should be completed by the clinician with the results of the ASSIST and used to give feedback and advice to the patient on their substance use. The patient should be encouraged to take the Report Card with them. The Report Card can be photocopied onto an A3 sheet of paper on both sides and folded over as a booklet. Page 1 consists of the ASSIST scores for each substance and risk levels, and pages 2 to 4 consist of specific health and other problems associated with substance use. Clinicians can use the Report Card in conjunction with a Brief Intervention.

### **Appendix D. Risks of Injecting – Information for Patients**

This one page sheet provides advice concerning risks associated with injecting drugs to accompany a brief intervention. This information sheet can be photocopied for general use in the treatment setting and to give to patients who have injected drugs in the last 3 months. Patients who are high risk injectors (injecting more than once per week or three or more days in a row) may also find this card helpful, but will require more intensive treatment.

### **Appendix E. Translation and Adaptation to Local Languages and Culture: A resource for clinicians and researchers**

This resource sets out the guidelines by which the ASSIST and related materials must be translated. Please contact the WHO if you are planning to translate the ASSIST into your language for registration.



# A. WHO - ASSIST V3.0

INTERVIEWER ID	<input type="text"/>	COUNTRY	<input type="text"/>	CLINIC	<input type="text"/>
PATIENT ID	<input type="text"/>	DATE	<input type="text"/>	<input type="text"/>	<input type="text"/>

**INTRODUCTION (Please read to patient)**

Thank you for agreeing to take part in this brief interview about alcohol, tobacco products and other drugs. I am going to ask you some questions about your experience of using these substances across your lifetime and in the past three months. These substances can be smoked, swallowed, snorted, inhaled, injected or taken in the form of pills (show drug card).

Some of the substances listed may be prescribed by a doctor (like amphetamines, sedatives, pain medications). For this interview, we will not record medications that are used as prescribed by your doctor. However, if you have taken such medications for reasons other than prescription, or taken them more frequently or at higher doses than prescribed, please let me know. While we are also interested in knowing about your use of various illicit drugs, please be assured that information on such use will be treated as strictly confidential.

**NOTE: BEFORE ASKING QUESTIONS, GIVE ASSIST RESPONSE CARD TO PATIENT**

**Question 1**

*(if completing follow-up please cross check the patient's answers with the answers given for Q1 at baseline. Any differences on this question should be queried)*

In your life, which of the following substances have you <u>ever used</u> ? (NON-MEDICAL USE ONLY)	No	Yes
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	3
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	3
d. Cocaine (coke, crack, etc.)	0	3
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	3
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	3
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	3
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	3
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	3
j. Other - specify:	0	3

Probe if all answers are negative: "Not even when you were in school?"	<i>If "No" to all items, stop interview. If "Yes" to any of these items, ask Question 2 for each substance ever used.</i>
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Question 2

In the <u>past three months</u> , how often have you used the substances you mentioned ( <i>FIRST DRUG, SECOND DRUG, ETC</i> )?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	2	3	4	6
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	2	3	4	6
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	2	3	4	6
d. Cocaine (coke, crack, etc.)	0	2	3	4	6
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	2	3	4	6
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	2	3	4	6
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	2	3	4	6
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	2	3	4	6
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	2	3	4	6
j. Other - specify:	0	2	3	4	6

***If "Never" to all items in Question 2, skip to Question 6.***

***If any substances in Question 2 were used in the previous three months, continue with Questions 3, 4 & 5 for each substance used.***

Question 3

During the <u>past three months</u> , how often have you had a strong desire or urge to use ( <i>FIRST DRUG, SECOND DRUG, ETC</i> )?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3	4	5	6
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	3	4	5	6
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	3	4	5	6
d. Cocaine (coke, crack, etc.)	0	3	4	5	6
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	3	4	5	6
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	3	4	5	6
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	3	4	5	6
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	3	4	5	6
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	3	4	5	6
j. Other - specify:	0	3	4	5	6

Question 4

During the <u>past three months</u> , how often has your use of ( <i>FIRST DRUG, SECOND DRUG, ETC</i> ) led to health, social, legal or financial problems?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	4	5	6	7
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	4	5	6	7
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	4	5	6	7
d. Cocaine (coke, crack, etc.)	0	4	5	6	7
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	4	5	6	7
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	4	5	6	7
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	4	5	6	7
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	4	5	6	7
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	4	5	6	7
j. Other - specify:	0	4	5	6	7

Question 5

During the <u>past three months</u> , how often have you failed to do what was normally expected of you because of your use of ( <i>FIRST DRUG, SECOND DRUG, ETC</i> )?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
a. Tobacco products					
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	5	6	7	8
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	5	6	7	8
d. Cocaine (coke, crack, etc.)	0	5	6	7	8
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	5	6	7	8
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	5	6	7	8
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	5	6	7	8
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	5	6	7	8
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	5	6	7	8
j. Other - specify:	0	5	6	7	8

**Ask Questions 6 & 7 for all substances ever used (i.e. those endorsed in Question 1)**

**Question 6**

Has a friend or relative or anyone else <u>ever</u> expressed concern about your use of ( <i>FIRST DRUG, SECOND DRUG, ETC.</i> )?	No, Never	Yes, in the past 3 months	Yes, but not in the past 3 months
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	6	3
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	6	3
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	6	3
d. Cocaine (coke, crack, etc.)	0	6	3
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	6	3
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	6	3
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	6	3
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	6	3
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	6	3
j. Other – specify:	0	6	3

**Question 7**

Have you <u>ever</u> tried and failed to control, cut down or stop using ( <i>FIRST DRUG, SECOND DRUG, ETC.</i> )?	No, Never	Yes, in the past 3 months	Yes, but not in the past 3 months
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	6	3
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	6	3
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	6	3
d. Cocaine (coke, crack, etc.)	0	6	3
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	6	3
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	6	3
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	6	3
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	6	3
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	6	3
j. Other – specify:	0	6	3

Question 8

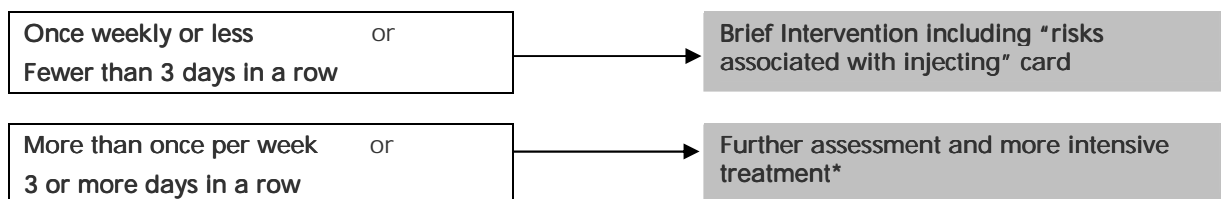
	No, Never	Yes, in the past 3 months	Yes, but not in the past 3 months
Have you <u>ever</u> used any drug by injection? <i>(NON-MEDICAL USE ONLY)</i>	0	2	1

IMPORTANT NOTE:

Patients who have injected drugs in the last 3 months should be asked about their pattern of injecting during this period, to determine their risk levels and the best course of intervention.

PATTERN OF INJECTING

INTERVENTION GUIDELINES



HOW TO CALCULATE A SPECIFIC SUBSTANCE INVOLVEMENT SCORE.

For each substance (labelled a. to j.) add up the scores received for questions 2 through 7 inclusive. Do not include the results from either Q1 or Q8 in this score. For example, a score for cannabis would be calculated as: **Q2c + Q3c + Q4c + Q5c + Q6c + Q7c**

Note that Q5 for tobacco is not coded, and is calculated as: **Q2a + Q3a + Q4a + Q6a + Q7a**

THE TYPE OF INTERVENTION IS DETERMINED BY THE PATIENT'S SPECIFIC SUBSTANCE INVOLVEMENT SCORE

	Record specific substance score	no intervention	receive brief intervention	more intensive treatment *
a. tobacco		0 - 3	4 - 26	27+
b. alcohol		0 - 10	11 - 26	27+
c. cannabis		0 - 3	4 - 26	27+
d. cocaine		0 - 3	4 - 26	27+
e. amphetamine		0 - 3	4 - 26	27+
f. inhalants		0 - 3	4 - 26	27+
g. sedatives		0 - 3	4 - 26	27+
h. hallucinogens		0 - 3	4 - 26	27+
i. opioids		0 - 3	4 - 26	27+
j. other drugs		0 - 3	4 - 26	27+

NOTE: \*FURTHER ASSESSMENT AND MORE INTENSIVE TREATMENT may be provided by the health professional(s) within your primary care setting, or, by a specialist drug and alcohol treatment service when available.

## B. WHO ASSIST V3.0 RESPONSE CARD FOR PATIENTS

### *Response Card - substances*

a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)
b. Alcoholic beverages (beer, wine, spirits, etc.)
c. Cannabis (marijuana, pot, grass, hash, etc.)
d. Cocaine (coke, crack, etc.)
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)
i. Opioids (heroin, morphine, methadone, codeine, etc.)
j. Other - specify:

---

### *Response Card (ASSIST Questions 2 – 5)*

**Never:** not used in the last 3 months

**Once or twice:** 1 to 2 times in the last 3 months.

**Monthly:** 1 to 3 times in one month.

**Weekly:** 1 to 4 times per week.

**Daily or almost daily:** 5 to 7 days per week.

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### *Response Card (ASSIST Questions 6 to 8)*

No, Never

Yes, but not in the past 3 months

Yes, in the past 3 months

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# C. ALCOHOL, SMOKING AND SUBSTANCE INVOLVEMENT SCREENING TEST (WHO ASSIST V3.0) FEEDBACK REPORT CARD FOR PATIENTS

Name \_\_\_\_\_ Test Date \_\_\_\_\_

## Specific Substance Involvement Scores

Substance	Score	Risk Level
a. Tobacco products		0-3 Low 4-26 Moderate 27+ High
b. Alcoholic Beverages		0-10 Low 11-26 Moderate 27+ High
c. Cannabis		0-3 Low 4-26 Moderate 27+ High
d. Cocaine		0-3 Low 4-26 Moderate 27+ High
e. Amphetamine type stimulants		0-3 Low 4-26 Moderate 27+ High
f. Inhalants		0-3 Low 4-26 Moderate 27+ High
g. Sedatives or Sleeping Pills		0-3 Low 4-26 Moderate 27+ High
h. Hallucinogens		0-3 Low 4-26 Moderate 27+ High
i. Opioids		0-3 Low 4-26 Moderate 27+ High
j. Other - specify		0-3 Low 4-26 Moderate 27+ High

### What do your scores mean?

- Low:** You are at low risk of health and other problems from your current pattern of use.
- Moderate:** You are at risk of health and other problems from your current pattern of substance use.
- High:** You are at high risk of experiencing severe problems (health, social, financial, legal, relationship) as a result of your current pattern of use and are likely to be dependent

**Are you concerned about your substance use?**

<b>a. tobacco</b>	Your risk of experiencing these harms is:.....	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
	(tick one)			
<b>Regular tobacco smoking is associated with:</b>				
	Premature aging, wrinkling of the skin			
	Respiratory infections and asthma			
	High blood pressure, diabetes			
	Respiratory infections, allergies and asthma in children of smokers			
	Miscarriage, premature labour and low birth weight babies for pregnant women			
	Kidney disease			
	Chronic obstructive airways disease			
	Heart disease, stroke, vascular disease			
	Cancers			

<b>b. alcohol</b>	Your risk of experiencing these harms is:.....	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
	(tick one)			
<b>Regular excessive alcohol use is associated with:</b>				
	Hangovers, aggressive and violent behaviour, accidents and injury			
	Reduced sexual performance, premature ageing			
	Digestive problems, ulcers, inflammation of the pancreas, high blood pressure			
	Anxiety and depression, relationship difficulties, financial and work problems			
	Difficulty remembering things and solving problems			
	Deformities and brain damage in babies of pregnant women			
	Stroke, permanent brain injury, muscle and nerve damage			
	Liver disease, pancreas disease			
	Cancers, suicide			

<b>c. cannabis</b>	Your risk of experiencing these harms is:.....	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
	(tick one)			
<b>Regular use of cannabis is associated with:</b>				
	Problems with attention and motivation			
	Anxiety, paranoia, panic, depression			
	Decreased memory and problem solving ability			
	High blood pressure			
	Asthma, bronchitis			
	Psychosis in those with a personal or family history of schizophrenia			
	Heart disease and chronic obstructive airways disease			
	Cancers			



<b>d. cocaine</b>	Your risk of experiencing these harms is:....	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
	(tick one)			
<b>Regular use of cocaine is associated with:</b>				
	Difficulty sleeping, heart racing, headaches, weight loss			
	Numbness, tingling, clammy skin, skin scratching or picking			
	Accidents and injury, financial problems			
	Irrational thoughts			
	Mood swings - anxiety, depression, mania			
	Aggression and paranoia			
	Intense craving, stress from the lifestyle			
	Psychosis after repeated use of high doses			
	Sudden death from heart problems			

<b>e. amphetamine type stimulants</b>	Your risk of experiencing these harms is:.....	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
	(tick one)			
<b>Regular use of amphetamine type stimulants is associated with:</b>				
	Difficulty sleeping, loss of appetite and weight loss, dehydration			
	jaw clenching, headaches, muscle pain			
	Mood swings -anxiety, depression, agitation, mania, panic, paranoia			
	Tremors, irregular heartbeat, shortness of breath			
	Aggressive and violent behaviour			
	Psychosis after repeated use of high doses			
	Permanent damage to brain cells			
	Liver damage, brain haemorrhage, sudden death (ecstasy) in rare situations			

<b>f. inhalants</b>	Your risk of experiencing these harms is:.....	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
	(tick one)			
<b>Regular use of inhalants is associated with:</b>				
	Dizziness and hallucinations, drowsiness, disorientation, blurred vision			
	Flu like symptoms, sinusitis, nosebleeds			
	Indigestion, stomach ulcers			
	Accidents and injury			
	Memory loss, confusion, depression, aggression			
	Coordination difficulties, slowed reactions, hypoxia			
	Delirium, seizures, coma, organ damage (heart, lungs, liver, kidneys)			
	Death from heart failure			

<b>g. sedatives</b>	Your risk of experiencing these harms is:	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
<b>Regular use of sedatives is associated with:</b>				
	Drowsiness, dizziness and confusion			
	Difficulty concentrating and remembering things			
	Nausea, headaches, unsteady gait			
	Sleeping problems			
	Anxiety and depression			
	Tolerance and dependence after a short period of use.			
	Severe withdrawal symptoms			
	Overdose and death if used with alcohol, opioids or other depressant drugs.			

<b>h. hallucinogens</b>	Your risk of experiencing these harms is:.....	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
<b>Regular use of hallucinogens is associated with:</b>				
	Hallucinations (pleasant or unpleasant) – visual, auditory, tactile, olfactory			
	Difficulty sleeping			
	Nausea and vomiting			
	Increased heart rate and blood pressure			
	Mood swings			
	Anxiety, panic, paranoia			
	Flash-backs			
	Increase the effects of mental illnesses such as schizophrenia			

<b>i. opioids</b>	Your risk of experiencing these harms is:	Low <input type="checkbox"/>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
<b>Regular use of opioids is associated with:</b>				
	Itching, nausea and vomiting			
	Drowsiness			
	Constipation, tooth decay			
	Difficulty concentrating and remembering things			
	Reduced sexual desire and sexual performance			
	Relationship difficulties			
	Financial and work problems, violations of law			
	Tolerance and dependence, withdrawal symptoms			
	Overdose and death from respiratory failure			

## D. RISKS OF INJECTING CARD – INFORMATION FOR PATIENTS

Using substances by injection increases the risk of harm from substance use.

This harm can come from:

- **The substance**
  - If you inject any drug you are more likely to become dependent.
  - If you inject amphetamines or cocaine you are more likely to experience psychosis.
  - If you inject heroin or other sedatives you are more likely to overdose.
- **The injecting behaviour**
  - If you inject you may damage your skin and veins and get infections.
  - You may cause scars, bruises, swelling, abscesses and ulcers.
  - Your veins might collapse.
  - If you inject into the neck you can cause a stroke.
- **Sharing of injecting equipment**
  - If you share injecting equipment (needles & syringes, spoons, filters, etc.) you are more likely to spread blood borne virus infections like Hepatitis B, Hepatitis C and HIV.
- ❖ **It is safer not to inject**
- ❖ **If you do inject:**
  - ✓ always use clean equipment (e.g., needles & syringes, spoons, filters, etc.)
  - ✓ always use a new needle and syringe
  - ✓ don't share equipment with other people
  - ✓ clean the preparation area
  - ✓ clean your hands
  - ✓ clean the injecting site
  - ✓ use a different injecting site each time
  - ✓ inject slowly
  - ✓ put your used needle and syringe in a hard container and dispose of it safely
- ❖ **If you use stimulant drugs like amphetamines or cocaine the following tips will help you reduce your risk of psychosis.**
  - ✓ avoid injecting and smoking
  - ✓ avoid using on a daily basis
- ❖ **If you use depressant drugs like heroin the following tips will help you reduce your risk of overdose.**
  - ✓ avoid using other drugs, especially sedatives or alcohol, on the same day
  - ✓ use a small amount and always have a trial "taste" of a new batch
  - ✓ have someone with you when you are using
  - ✓ avoid injecting in places where no-one can get to you if you do overdose
  - ✓ know the telephone numbers of the ambulance service

## E. TRANSLATION AND ADAPTATION TO LOCAL LANGUAGES AND CULTURE: A RESOURCE FOR CLINICIANS AND RESEARCHERS

The ASSIST instrument, instructions, drug cards, response scales and resource manuals may need to be translated into local languages for use in particular countries or regions. Translation from English should be as direct as possible to maintain the integrity of the tools and documents. However, in some cultural settings and linguistic groups, aspects of the ASSIST and its companion documents may not be able to be translated literally and there may be socio-cultural factors that will need to be taken into account in addition to semantic meaning. In particular, substance names may require adaptation to conform to local conditions, and it is also worth noting that the definition of a standard drink may vary from country to country.

Translation should be undertaken by a bi-lingual translator, preferably a health professional with experience in interviewing. For the ASSIST instrument itself, translations should be reviewed by a bi-lingual expert panel to ensure that the instrument is not ambiguous. Back translation into English should then be carried out by another independent translator whose main language is English to ensure that no meaning has been lost in the translation. This strict translation procedure is critical for the ASSIST instrument to ensure that comparable information is obtained wherever the ASSIST is used across the world.

Translation of this manual and companion documents may also be undertaken if required. These do not need to undergo the full procedure described above, but should include an expert bi-lingual panel.

Before attempting to translate the ASSIST and related documents into other languages, interested individuals should consult with the WHO about the procedures to be followed and the availability of other translations. Write to the Department of Mental Health and Substance Dependence, World Health Organisation, 1211 Geneva 27, Switzerland.