

Head the Horse off at the Pass

Or...Screening for Substance Use
Disorders In the Primary Setting

By- Blair Bishop & Rachel Campbell

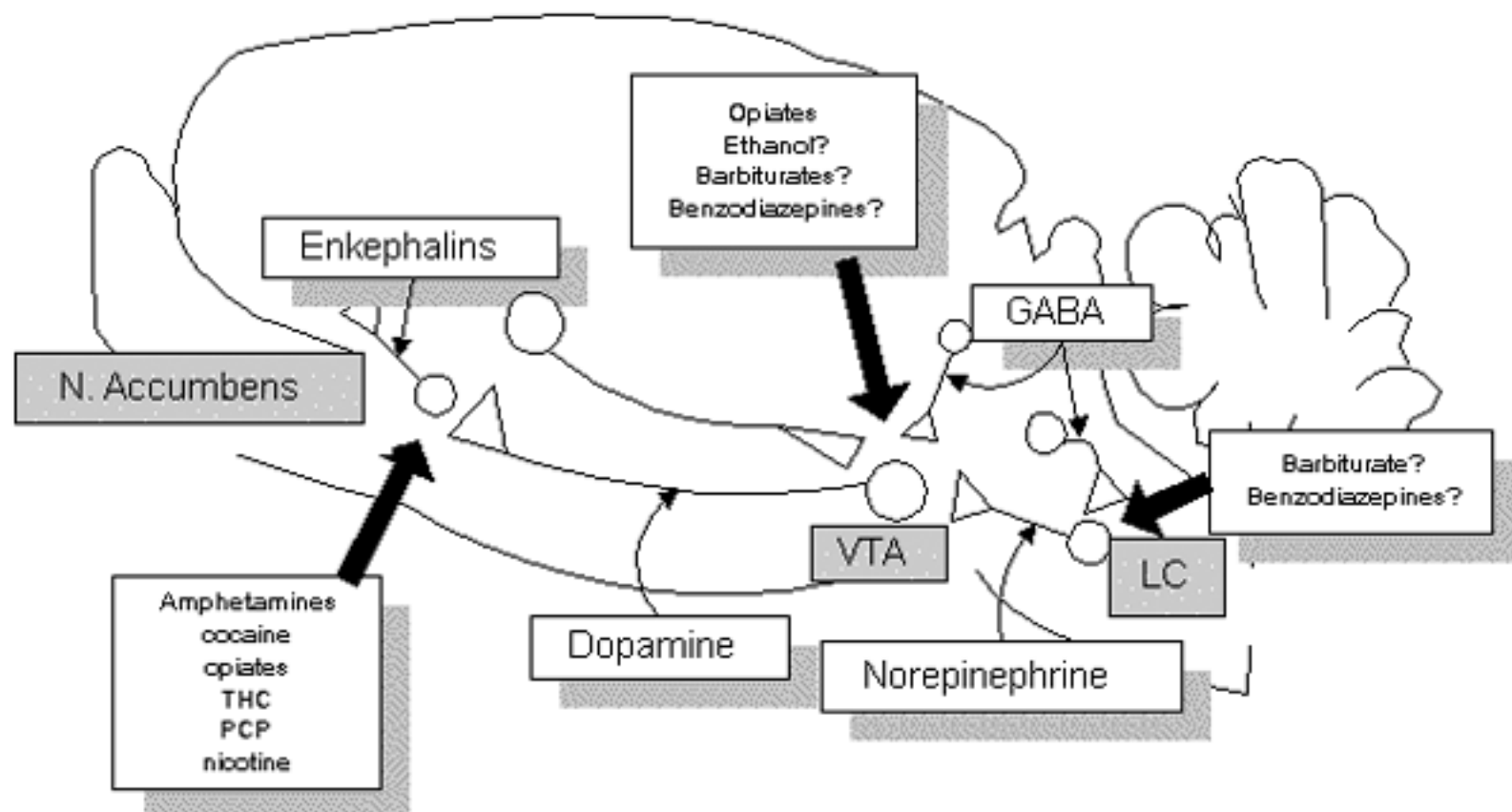
A very brief history of substance use.

- There has been co-evolution of mammalian brains and ancient psychotropic plants (Saah, 2005).
- Hedonism and cultural use abound (Saah, 2005).
- <https://www.youtube.com/watch?v=pSm7BcQHWXk>

What defines a substance use disorder?

- Compulsion (APA, 2013).
- Control (APA, 2013).
- Consequences (APA, 2013).

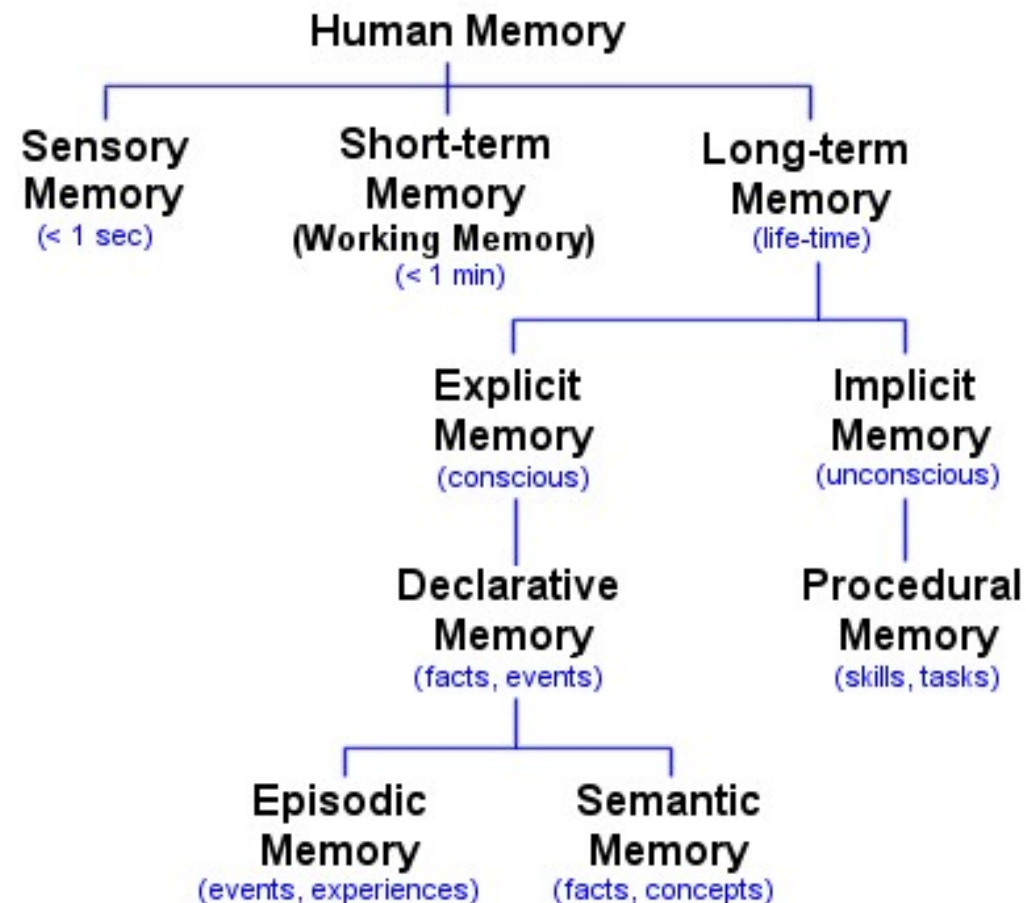
The biochemistry of use disorder



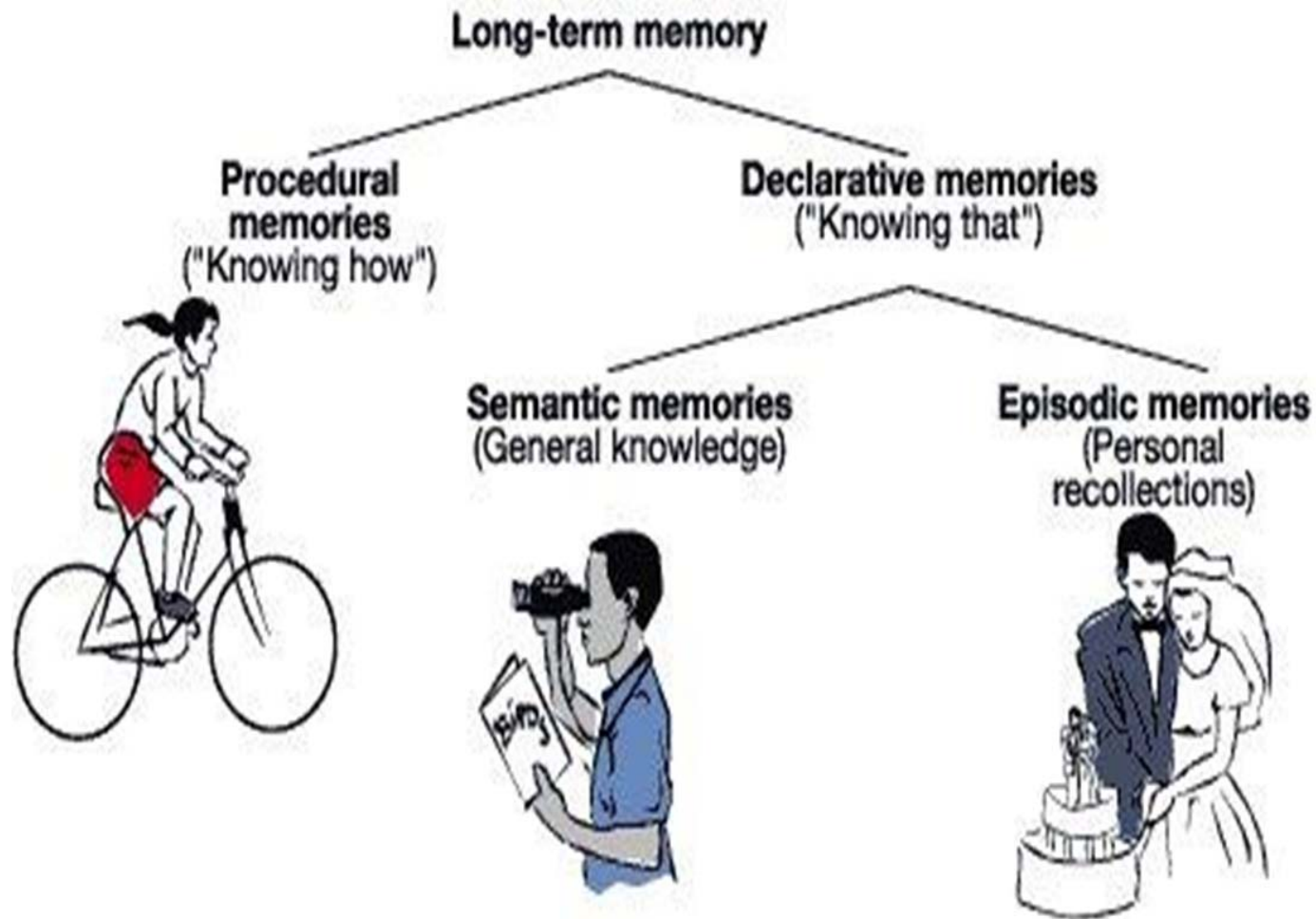
Addiction Memory (AM)

- “Memory of Addiction” first described by Mello in 1972
- “Addiction Memory is an individually acquired software disturbance related to feedback loops of neuronal processing” (Boening, 2001).
- The AM becomes part of the personality represented at the molecular level via the neuronal level, especially in the episodic memory

Addiction Memory (AM)



Addiction Memory (AM)



Alcohol, Smoking and Substance Involvement Screening Test- ASSIST

- Screen for use disorders with ASSIST
- Then use ASSIST 'response cards' to guide your brief intervention
- http://www.who.int/entity/substance_abuse/activities/assist_v3_english.pdf?ua=1

Why to screen for alcohol and other drug use

- Alcohol is linked to numerous health complications.
- Most complications are treatable when diagnosed early on.
- Alcohol and Drug use/dependence have a high impact on a persons global health.

Drugs ranked according to total harm

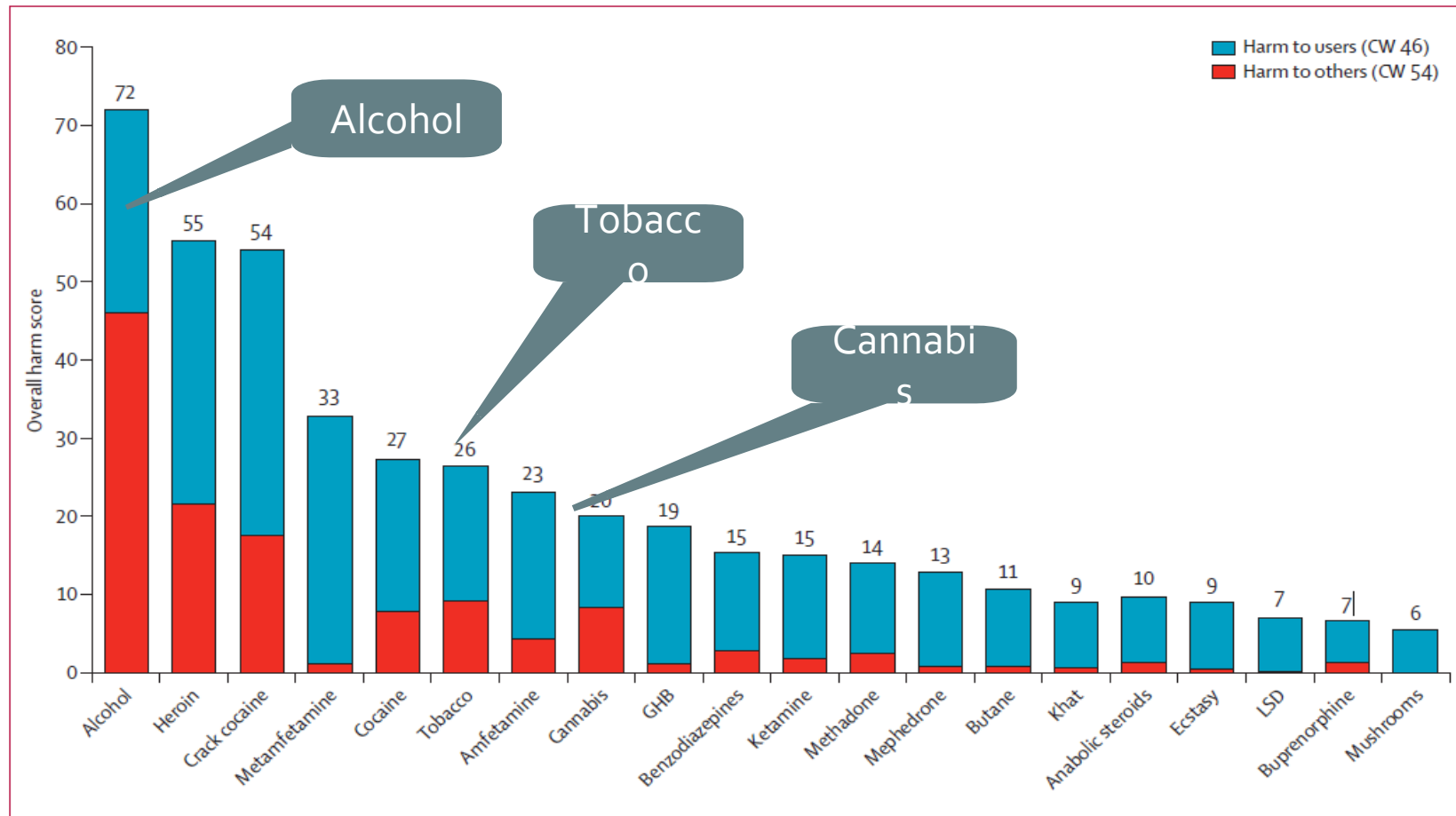
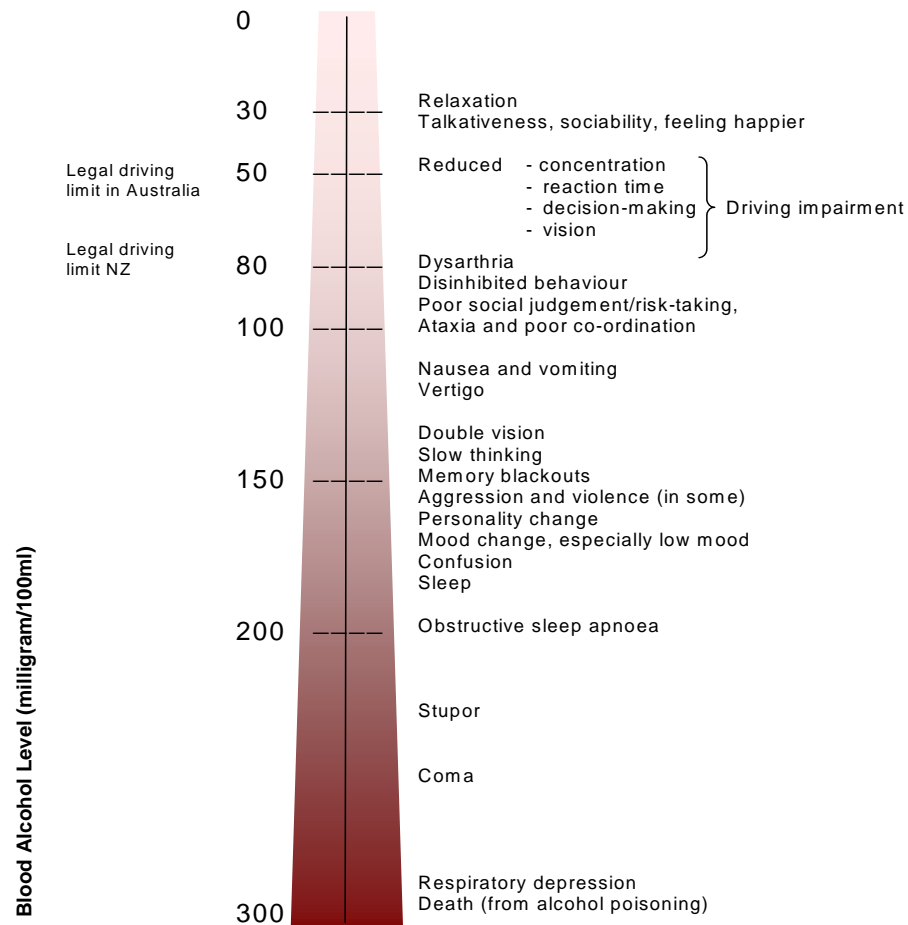
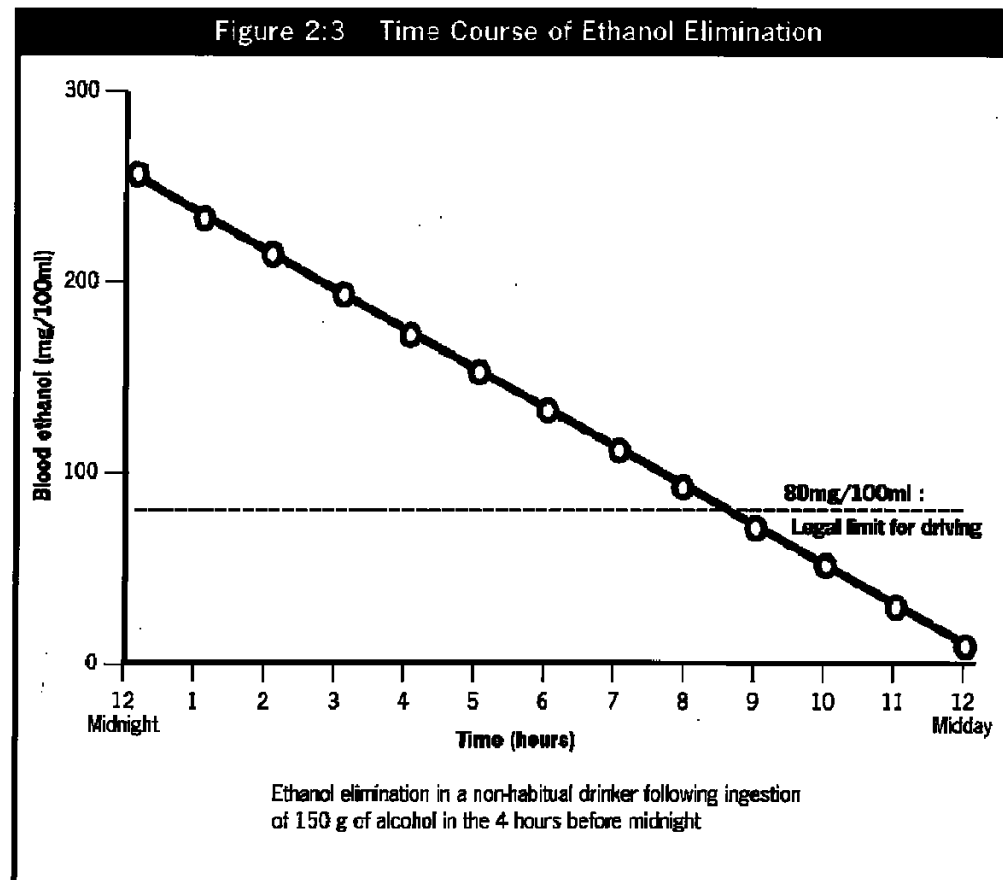


Figure 2: Drugs ordered by their overall harm scores, showing the separate contributions to the overall scores of harms to users and harm to others
The weights after normalisation (0–100) are shown in the key (cumulative in the sense of the sum of all the normalised weights for all the criteria to users, 46; and for all the criteria to others, 54). CW=cumulative weight. GHB=γ hydroxybutyric acid. LSD=lysergic acid diethylamide.

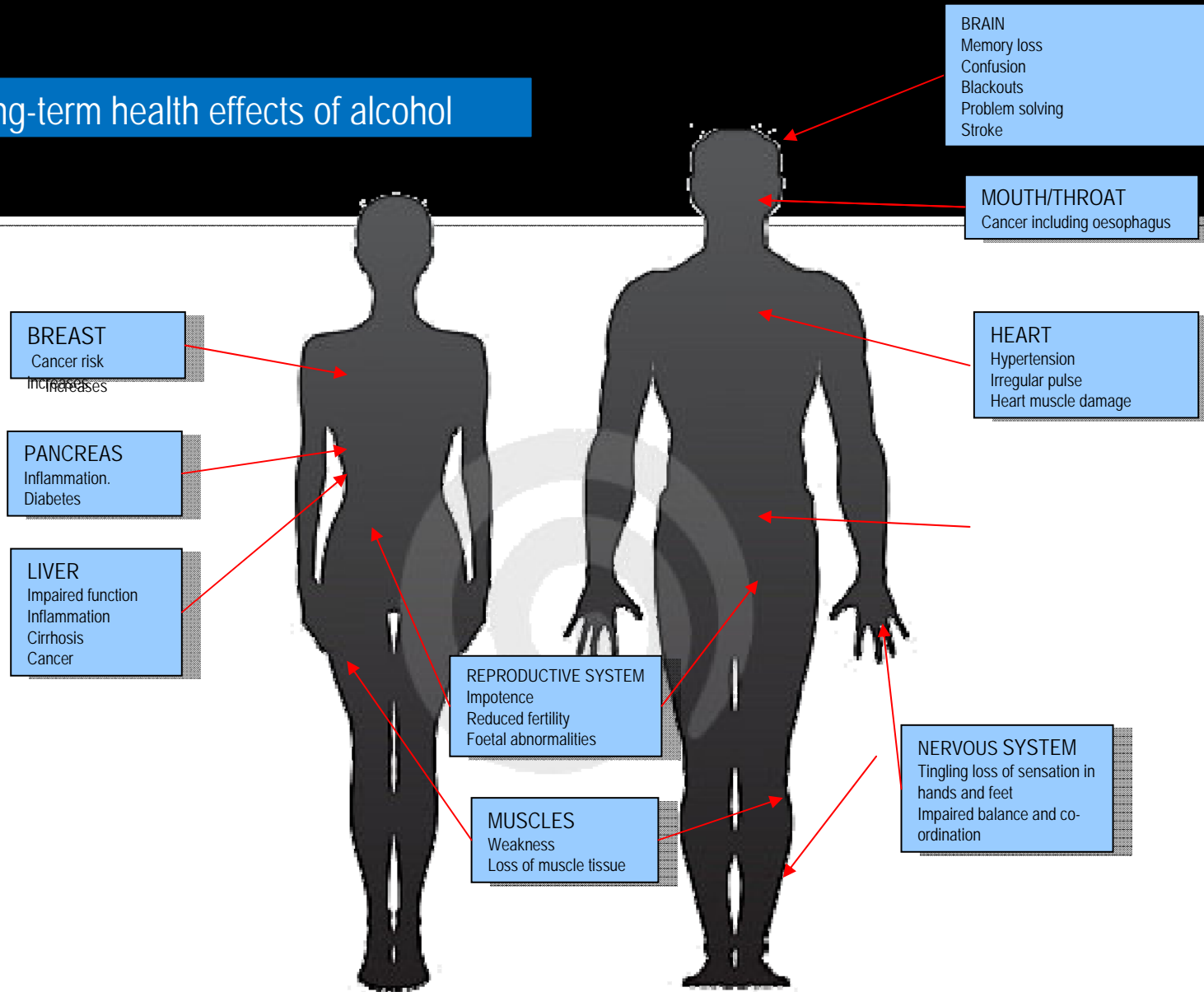
The effects of alcohol in non-tolerant persons



The Course of Ethanol Elimination



Long-term health effects of alcohol



Global Burden of Disease 2010

(Lancet 2013 Lim S et al)

- Alcohol 3rd leading risk factor
(High BP, smoking)
- 40% world adults drink alcohol
(ave: 17.1 litres/year)
- Alcohol caused 2.8% of all deaths in 2010
(cancer, cirrohsis, injury)
- Increasing since 1990 GBD studies
(Rehm J, et al 2014)

When to consider screening for alcohol and drug use

- Client is concerned about their drinking or drug use.
- Low mood and/or anxiety.
- Unexplained abnormal liver functions.
- Unexplained changes in BP.
- Ongoing unexplained gastric difficulties.
- Pancreatitis.
- Persistent disturbed sleep.
- Frequent presentations to ED for accidents.
- Frequently requesting medications potentially of abuse.
- Evidence of injecting.

Why to screen for alcohol and other drug use

- Alcohol is linked to numerous health complications.
- Most complications are treatable when diagnosed early on.
- Alcohol and Drug use/dependence have a high impact on a persons global health.

ASSIST

■ **W.H.O**

Question 1

In your life, which of the following substances have you ever used? (NON-MEDICAL USE ONLY)

- 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
-
- Yes or no answers

Question 2

In the past three months, how often have you used the substances you mentioned (*FIRST DRUG, SECOND DRUG, ETC*)?

- 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
-
- Answers are rated never – daily or almost daily

Question 3

During the past three months, how often have you had a strong desire or urge to use (*FIRST DRUG, SECOND DRUG, ETC*)?

- 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

Answers are rated never – daily or almost daily

Question 4

During the past three months, how often has your use of (*FIRST DRUG, SECOND DRUG, ETC*) led to health, social, legal or financial problems?

- 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

Answers are rated never – daily or almost daily

Question 5

During the past three months, how often have you failed to do what was normally expected of you because of your use of (FIRST DRUG, SECOND DRUG, ETC)?

- a. Tobacco products
- 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

Answers are rated never – daily or almost daily

Question 6

Has a friend or relative or anyone else ever expressed concern about your use of (FIRST DRUG, SECOND DRUG, ETC.)?

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

- 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
- Questions are answered: No Never, Yes in the past 3 months, Yes but not in the past 3 months

Question 7

**Have you ever tried and failed to control, cut down or stop using
(FIRST DRUG, SECOND DRUG, ETC.)?**

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

- 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

Questions are answered: No Never, Yes in the past 3 months, Yes but not in the past 3 months

Question 8

Have you ever used any drug by injection?

- No, Never
- Yes, in the past 3 months
- Yes, but not in the past 3 months

The type of intervention is determined by the patient's specific substance involvement score

	Record specific 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+

Do you tell the client to keep drinking?

- There is potential risk to the patient if they are alcohol dependent and stop drinking “cold turkey” without medical support.
- However most patients can safely gradually reduce the amount of alcohol they drink.
- When there is suspicion of alcohol dependence a referral to Alcohol and Drug services should be made with the patient.

Standard drinks

- One can of beer = 1 standard drink
- One bottle of wine = 7.1 – 8.3 standard drinks
- One bottle RTD = 2.1 standard drinks
- 3 liter cask of wine = 30 standard drinks
- 1 liter bottle of spirits = 37 standard drinks

Symptoms of Withdrawal Mild to moderate alcohol withdrawal

- Mild rise in temperature
- Mild hypertension
- Mild anxiety
- Slight tremor
- Mild sweating
- Nausea, vomiting
- Mild dehydration
- Headache
- Tachycardia
- Dyspepsia
- Sleep problems
- Insomnia, nightmares (moderate)
- Agitation (moderate)

Symptoms of severe alcohol withdrawal

Normal associated with daily consumption of more than 15 standard drinks.

- Hypertension
- Raised temperature
- Marked tremor
- Withdrawal seizures or history of seizures
- Dehydration
- Excessive sweating
- Nausea, vomiting, diarrhoea
- Acute anxiety
- Restlessness and or agitation
- Hypersensitivity to stimulation
- Hallucination
- Severely depressed mood
- Psychosis related to substance use

Thiamine

- Thiamine is water soluble B₁.
- B₁ deficiency can cause Wernicke's encephalopathy.
- If not treated rapidly can lead to permanent brain damage and memory loss.
- Consider patients need for a thiamine supplement if drinking regularly.

Referrals and Treatment Options in the Wellington Region

- Case Management
- CBT
- Psychotherapy
- Motivational Enhancement (M.I., Assessment Feedback and Handouts)
- Brief Intervention Therapy
- 12 step approach AA-Groups
- Medication/Pharmacological treatments (Disulfiram, Naltrexone, Baclofen)
- Group work (DBT or mindful movement)
- Residential Treatment Facilities (Odyssey House, Nova, Spring Hill)
- Outpatient treatment NGO's (Care NZ or Pact)

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Boening (2001). *Journal of Neural transmission* 108: 755-765
- Kypros Kypri, Jennie Connor, Doug Sellman. *The dissolution of the Alcohol Advisory Council: a blow for public health* 20th February 2015, Volume 128 Number 1409
- Mello (1972) *Behavioural Studies in Alcoholism*. In: Kissin B, Begleiter H (eds) *Biology of Alcoholism*. Plenum Press, New York. Pp210-219
- Rehm J1, Dawson D, Frick U, Gmel G, Roerecke M, Shield KD, Grant B. *Burden of disease associated with alcohol use disorders in the United States*. *Alcohol Clin Exp Res*. 2014 Apr;38(4):1068-77.
- Saah, T. (2005). The evolutionary origins and significance of drug addiction. *Harm Reduction Journal*, 2, (8).
- <http://www.health.govt.nz/publication/new-zealand-practice-guidelines-opioid-substitution-treatment-2014>

Alcohol, Smoking and Substance Involvement Screening Test- ASSIST

- http://www.who.int/entity/substance_abuse/activities/assist_v3_english.pdf?ua=1

Any Questions?

