

CANNABIS INFORMATION Websites(written info)	Cannabis Skunk Sense (CanSS)	Mentor UK	FRANK	The Site	John Moores University
TYPE OF ORGANISATION (HR is Harm Reduction)	Prevention charity Aim: To educate the public, especially children about the true dangers of cannabis.	‘Prevention’ charity but has a HR policy. Gov-funded for drug education in schools- ADEPIS – (Alcohol and Drug Education Prevention Information Service).	Official government website for drug information. Recommended by Mentor UK.	Non-judgemental facts and advice. ‘Your guide to the real world’. Recommended by Mentor UK	Commissioned by Government to produce a report on drugs to inform FRANK. Birthplace of HR.
FORM of CANNABIS	Old herbal Hash (resin) Skunk % THC and share of market given. Skunk now 80%.	Marijuana – dried flowers, leaves etc. THC mentioned. NO SKUNK!	THC. Hash (resin) much less common now. Grass (weed, much weaker than skunk. Skunk – stronger herbal cannabis – may be more risky Cannabis Oil – much less common.	Grass (weed etc) Hash (resin) Cannabis Oil. THC NO SKUNK!	Traditional herbal Hash (resin) Skunk (Higher potency form) THC. Increase in market share of skunk.
CBD CANNABIDIOL (anti-psychotic)	Mode of action and % in hash, skunk given.	No information	No information	No information	No information
METHOD OF USE	Smoked with/without tobacco. Eaten (hash cakes) – difficult to control dose, slower to act, Children (Colorado) poisoned.	Smoked joints, pipe, blunts, bong, food, tea.	Smoked with tobacco in joints or spliffs. Bong, cakes, tea, e-cigarettes. Eaten – takes longer to ‘work’. More difficult to control.	Smoked with tobacco, bong, pipe, eaten, inhaled (hot box). Cakes – up to 30 mins to ‘work’.	Smoked with tobacco. Oral – difficult to regulate. Some binge use.
	Euphoria- ‘high’.	Short-term memory	Chilled, happy,	Chilled (stoned),	Insomnia,

<p align="center">IMMEDIATE EFFECTS</p>	<p>Enhances mood - may feel worse. Giggly, get 'munchies', Panic attacks, anxiety, paranoia, time slows. hallucinations.</p>	<p>loss, distorts perception, difficult to think or solve problems, loss of coordination, heart rate rises, anxiety, panic.</p>	<p>chatty, relaxed, giggly, time slows, hallucinations, sensory awareness, panic, 'munchies', whitey (faint, nauseous), anxious, aggressive, paranoid, suspicious. Some effects last days.</p>	<p>chatty, hilarity, deep thoughts, sensory awareness e.g. music, time slows, lose short-term memory, 'munchies', Cough, headache, dizzy, confused, clumsy, sick, low BP. Comedown: tired, foggy, dry mouth, red eye, racing heart, panic, hallucinations, whitey. Feel 'crap' for days.</p>	<p>depression, aggression, anxiety. Facial flushing, nausea, vomiting, abdominal pain. Affects motor coordination and performance. Hallucinations, amnesia, confusion, impaired judgement, paranoia, low mood, panic, drowsy, euphoria, hypomanic symptoms, agitation, distress. Short-lived reversible psychotic reaction.</p>
<p align="center">DRIVING</p>	<p>Average joint = same effect as just over the drink-drive limit. Alcohol plus pot is 16 times more dangerous than either alone. No driving for at least 24 hours after joint.</p>	<p>No information</p>	<p>Crash risk about doubled. Alcohol and pot about 16 times more dangerous.</p>	<p>'Don't drive when you're high'.</p>	<p>No information</p>
<p align="center">PERSISTENCE IN CELLS</p>	<p>THC dissolves in fatty cell membranes and persists. 50% for a week and 10% for a month. Traces in hair</p>	<p>No information</p>	<p>No information</p>	<p>No information</p>	<p>No information</p>

	and urine for weeks.				
COGNITIVE (C) LEARNING (L) MEMORY (M) PERSONALITY (P)	Neuron transmission and formation of brain connections impaired by THC presence. CLMP all badly affected. Few achieve full potential. IQ drops av. 8 points if continue to use. Brains still developing in young so the earlier the start, worse the damage. They have fixed ideas, can't reason, drop out of education, find relationships difficult, are lonely and miserable.	Hippocampus (L, M, emotion, motivation, attention, all affected. Lower achievement, More delinquency, deviant behaviour, relationship with parents poor. Difficult to sustain attention or registering, processing and using information.	Regular heavy use makes it difficult to concentrate, learn, memorise. Less motivation, poor exam results, serious as brain still developing.	Losing short-term memory, clumsy, concentration affected by heavy use.	No severe or gross debilitating impairment in cognitive functions. Subtle impairment of M, L, attention, organisation and integration of complex information. May or not be reversible. Amotivational syndrome questioned.
MENTAL ILLNESS	Anyone taking enough can become psychotic. Skunk users 7 times more likely than hash users to suffer psychosis. Increase in dopamine (brains of psychotics and schizophrenics have excess). Schizophrenia has	No information No mention of psychosis or schizophrenia!	Some people linked to serious long-term mental health problems, Schizophrenia - family background increases risk. Cannabis use can cause relapse.	Most won't get mental health problems. Doesn't cause schizophrenia directly but care if relatives mentally affected. Worse if start in teens.	Increased risk of psychosis in those with personal/family history of schizophrenia. Cannabis use can relapse or precipitate. Bingeing may increase risk psychosis. Early start and regular heavy

	genetic basis – genes being sought. Skunk users have 3 times risk of psychosis, daily users, risk is 5.				use – small but significant increased risk psychosis.
ADDICTION	Psychological and physical addiction fully explained with symptoms of withdrawal and figures given.	Marijuana is addictive. Animal studies suggest also physical with withdrawal symptoms.	Dependency cravings difficult to stop. Addicted to tobacco if combined. Withdrawal symptoms given.	Not physically addictive. If used with tobacco – addicted to that. Potential psychological addiction.	Dependence occurs – withdrawal symptoms given. Frequent heavy users at greatest risk.
IMMUNE SYSTEM	THC Damages DNA of any new cells made in adult body – hastens apoptosis (programmed cell death). Fewer white blood cells, some abnormal, People more vulnerable to disease and more serious.	Illicit drugs used in pregnancy may interfere with nutrition and rest, thus affecting the immune system.	No information	Heavy smoking damages immune system.	Evidence limited.
REPRODUCTIVE SYSTEM	THC hastens apoptosis in sperm and foetal cells. Fewer sperm, infertility, impotence, smaller babies, hyperactive, behaviour and learning problems,	More anger, aggression in toddlers, smaller babies, motor development impaired in first month of breast feeding.	May affect fertility, lower sperm count, suppresses ovulation, smaller babies.	Linked with lower sperm count and lower fertility in women.	Reduced birth weight, mild development problems but confounded by use of alcohol, tobacco etc. Can inhibit reproductive functions, disrupt

	withdrawal symptoms at birth, more likely to use it at adolescence. miscarriages and ectopic pregnancies.				ovulation and sperm production and function.
LUNG DISEASES including CANCER	3 to 4 times as much tar deposited in airways compared with tobacco smoke. Lung cancer, worsens asthma, bronchitis, emphysema.	3 to 5 times more tar and carbon monoxide inhaled than with tobacco smoke. Chest colds, respiratory problems, cough, phlegm, bronchitis, abnormal functioning of lung tissue.	Lung cancer, worsens asthma, cough. TB. All risks of tobacco if combined.	Cancer and respiratory problems, coughs, worsens asthma. Chest infections.	No conclusive evidence for cancer but may be a risk factor. Bronchitis, lung damage, bullous lung disease. Asthmatics - cough, persistent sore throat, bronchospasm.
OTHER CANCERS	Head, neck, tongue, testicle, bladder.	No information	No information	No information	No information.
CARDIOVASCULAR SYSEM	Blood pressure (BP) and Heart Rate (HR) rise. Heart attacks, strokes, deaths.	Increased Heart Rate and Blood Pressure.	Increased HR and BP	Low BP	HR increased and sometimes BP. Detrimental to those with heart disease.
DEPRESSION	THC reduces levels of serotonin (happiness neurotransmitter).	No information	Depression	No information	Depression
VIOLENCE AND SUICIDE	Swedish study: More suicides than heroin, alcohol, amphetamine users. Death more violent. Young men nearly 4	Toddlers more tantrums and anger. Aggression, rebelliousness.	Aggression	No information	Aggression

	times more likely to be violent, alcohol users – 3 times. Due to psychosis or withdrawal. Parents/siblings injured, homicides.				
BRAIN SCANS AND DAMAGE	Brain damage, volume grey matter (cell bodies) reduced in hippocampus (learning), amygdala (emotions), anterior cingulate (motivation), pre-frontal cortex (regulation of complex cognitive, emotional, and behavioral functioning). Smaller white matter area in cerebellum.	Long-term changes to brain similar to those caused by other drugs.	No information	No information	No evidence of structural brain change after heavy long-term use.
GATEWAY	Increasing scientific evidence from animal experiments and long-term (from birth) human studies.	No information	No information	No information	More likely to be lifestyle, personality, access to other drugs than cannabis itself.

GENERAL TONE	Serious, scientific	Serious	Mostly serious but mildly patronising 'chemical nasties'	Very 'matey' 'Whether you plan to bake some hash brownies, swan off to Amsterdam, or to grow your own – make sure you know the facts about cannabis first'	Serious
MEDICAL USE	Is a scam! 1979 USA lawyer – 'We will use medical marijuana as red herring to give pot a good name'. Potential medicine must be extracted, purified so dose predictable and controllable. UK Nabilone and USA Marinol (synthetic THC) available for years. No-one would eat mouldy bread to get penicillin!	No information	No information	No information	No information
HARM REDUCTION (HR) TIPS	None	None	HR tips removed at my request	5 HR tips given	None
SIMPLE SCIENTIFIC EXPLANATIONS	All adverse effects scientifically explained in simple terms.	THC mode of action.	None	None	None

