Medical Cannabis Use in the Elderly

There is increasing interest in the use of cannabis to treat various medical conditions and symptoms in older adults. Medical cannabis has been studied for treatment of: chronic pain; induced nausea and vomiting from chemotherapy; epilepsy; and spasticity due to multiple sclerosis (MS). There may also be some benefits in treating agitation in people with dementia, and research is expanding.

Types and Use of Medical Cannabis: Start Low, Go Slow, Stay Low

	ORAL	INHALATION
Formulation	Oil, Capsules	Vaporization, Smoking
Dosing (No established dosing guidelines)	Oil: 2-3 mg (e.g., 0.1 mL of 20 mg/mL CBD* product) on the tongue at bedtime (consider 7 p.m. for first dose to assess effect and tolerability). Increase by 0.1 mL every 1-2 days. Capsules: 1-2 capsules daily.	Start with 1 inhalation, wait 15-30 minutes to gauge effects and tolerability. Then increase dose slowly until symptoms are controlled. Use 1-2 inhalations at bedtime (with one puff containing 1-10 mg THC**).
Dose Conversion	**Oral dose = Smoked dose x 2.5** Cannabis is metabolized by the liver. No dosing adjustment is required in residents with impaired renal function.	
Onset	30-60 minutes	5-10 minutes
Maximum Effect	2-3 hours	10-20 minutes
Duration of Action	4-6 hours	2-4 hours
Comments	• Ideal for chronic conditions due to long duration of action requiring less frequent dosing. • Oil may be easier to titrate, easier to use for residents who have difficulty swallowing, and may be less costly than capsules. • Higher risk of overdose due to delayed onset of effect.	• Vaporization could be ideal for residents with episodic acute symptoms (fast onset). • Vaporization is preferred over smoking: - Less harmful to lungs than smoking. - Less waste: up to 50% of medication is lost to "side stream" smoke.
To discontinue, gradually reduce amount over several days or weeks to avoid withdrawal symptoms.		

*CBD = Cannabidiol **THC = Delta-9-tetrahydrocannabinol
Cannabis should be avoided in residents with active/unstable cardiovascular conditions or history of substance use disorder or psychosis.

Side effects of concern in the elderly:
• drowsiness
• dizziness
• cognitive impairment
• orthostatic hypotension and falls
• tachycardia
• ataxia (discoordination)

Drug interactions:
Drug interactions may occur with medications with psychoactive effects such as antidepressants, antipsychotics, benzodiazepines, opioids, and anticonvulsants.

References:
• van den Elsen GAH, Ahmed AIA, Lammers M, et al. Efficacy and safety of medical cannabinoids in older subjects. Age Res Rev 2014;14:56-64.
• Canadian Pharmacists Association. Cannabis monograph. April 2018.
• Crawley A, LeBras M, Regier L. Cannabinoids: overview. RxFiles. October 2018.