

Sick Day Management: Medications to Hold

The COVID-19 pandemic has created unique challenges for older adults. It has been shown that acute infectious diseases can cause dehydration and volume depletion, which subsequently increases the risk of acute kidney injury and adverse effects of certain medications, leading to a high mortality rate in this population.^{1,2}

It is for this reason that several medications should be stopped temporarily for residents who have symptoms such as a fever, diarrhea, or vomiting, or cannot eat or drink. These medications, which can be remembered by using the acronym “SADMANS,” are listed in the table below.

MEDICATION TYPE	EXAMPLES	REASON TO HOLD
S Sulfonylureas, other secretagogues	Gliclazide (Diamicon® MR), Glimepiride, Glyburide, Repaglinide (GlucosNorm®)	<ul style="list-style-type: none"> Increased risk of low blood glucose (hypoglycemia).
A ACE inhibitors	Benazepril, Captopril, Cilazapril (Inhibace®), Enalapril (Vasotec®), Fosinopril, Lisinopril (Zestril®), Perindopril (Coverisyl®), Quinapril (Accupril®), Ramipril (Altace®), Trandolapril (Mavik®)	<ul style="list-style-type: none"> Increased risk of worsening renal function.
D Diuretics, direct renin inhibitor	<p>Diuretics: Chlorthalidone, Eplerenone (Inspra®), Furosemide (Lasix®), Hydrochlorothiazide, Indapamide (Lozide®), Metolazone (Zaroxolyn®), Spironolactone (Aldactone®)</p> <p>Direct renin inhibitor: Aliskiren (Rasilez®)</p>	<ul style="list-style-type: none"> Increased risk of worsening renal function. Consider heart failure and edema status when determining whether or not to hold diuretics in residents with heart failure.
M Metformin	Glucophage®, Glumetza®, generics	<ul style="list-style-type: none"> Increased risk of adverse effects, such as gastrointestinal upset. May need to restart at a lower dose to re-establish tolerability.
A Angiotensin receptor blockers (ARBs)	Candesartan (Atacand®), Eprosartan (Teveten®), Losartan (Cozaar®), Irbesartan (Avapro®), Olmesartan (Olmetec®), Telmisartan (Micardis®), Valsartan (Diovan®), Valsartan/Sacubitril (Entresto™)	<ul style="list-style-type: none"> Increased risk of worsening renal function.
N Nonsteroidal anti-inflammatory drugs (NSAIDs)	ASA (Aspirin®, Entrophen®), Celecoxib (Celebrex®), Diclofenac (Voltaren®), Ibuprofen (Advil®, Motrin®), Naproxen (Naprosyn®, Aleve®), Indomethacin, Ketorolac (Toradol®)	<ul style="list-style-type: none"> Increased risk of worsening renal function. Low-dose ASA (e.g., 81 mg) can usually be continued.
S SGLT2 inhibitors (“flozins”)	Canagliflozin (Invokana®), Dapagliflozin (Forxiga®), Empagliflozin (Jardiance®), Ertugliflozin (Steglatro™)	<ul style="list-style-type: none"> Increased risk of worsening renal function.

Note: Combination products that contain any of the types of medications listed in this table should also be temporarily stopped during illness. References for table: 3, 4

References:

- Cheng Y, Luo R, Wang K, et al. Kidney disease is associated with in-hospital death of patients with COVID-19. *Kidney International* 2020;97:829-838.
- Parmar MS. Sick days off – a simple strategy to prevent acute kidney injury and other adverse drug reactions. *The Pharmaceutical Journal*. October 16, 2017.
- Canadian Diabetes Association. Appendix 8: Sick Day Medication List. *Can J Diabetes* 2018;42:S316.
- Rx Files. Type 2 diabetes and sick days. Medications to pause. 2018.