Medicines and Dehydration – Sick Day Rules Guideline

Fluid loss and dehydration can be a significant risk to patients taking certain medicines, particularly when intercurrent illness (see Fig.1) is present with existing medical conditions like diabetes, hypertension, or chronic kidney disease. Detailed information leaflets about sick day rules for patients with diabetes are available from TREND for type 2 diabetes - here, and type 1 diabetes – here.

The advice in this document does not apply to minor sickness and diarrhoea, meaning single episodes happening only once in a period of time.

Dehydration, Acute Kidney Injury (AKI) and complications of diabetes can be reduced by applying sick day rules for certain medications during acute severe intercurrent illness.

The common medications that can lead to dehydration and should be temporarily paused or stopped during illness (i.e. sick days), can be remembered by using the **SADMAN** mnemonic (See Table 1 below).

Fig.1. Examples of intercurrent illness that can cause dehydration and/or increased blood glucose levels in patients with diabetes (not exhaustive)

- The common cold
- Influenza
- Diarrhoea and/or vomiting
- Urinary tract infection
- Chest infection
- Pneumonia
- Abscess
- Injury (e.g. fracture)

Table 1: SADMAN Rules: classes of medication that should be temporarily stopped during intercurrent illness (non-exhaustive)

	Examples		Associated risk if continued during an acute illness that can lead to dehydration:
S	**SGLT-2 Inhibitors**	Names ending with: *'flozins'* *dapagliflozin, empagliflozin, canagliflozin, ertugliflozin*	Euglycemic diabetic ketoacidosis – if a patient with diabetes presents unwell, their blood ketone levels should be checked by the clinician, even if blood glucose levels are in normal range. No routine prescrbing of ketone testing strips is advised solely for use by patients on SGLT-2 inhibitors.
A	**ACE-I inhibitors**	Names ending with: *'prils'* ramipril, lisinopril, perindopril, enalapril, captopril	Acute Kidney Injury (AKI) due to reduced renal efferent vasoconstriction.
D	**Diuretics***	Names ending with: *'ide'* or *'one'* bendroflumethiazide, furosemide, bumetanide, or spironolactone, eplerenone	AKI
M	**Metformin**	metformin, metformin SR	Lactic acidosis
A	**ARBs**	Names ending in: 'sartans' losartan, candesartan, valsartan, irbesartan	AKI
N	**NSAIDs (oral)**	ibuprofen, naproxen, diclofenac	AKI due to reduced renal afferent vasodilation

Once the person is feeling better and is able to eat and drink for 24–48 hours, these medications should be restarted.

***The decision regarding pausing a diuretic used for the treatment of heart failure should be based on the patient's current fluid status, which should be assessed by a clinician before pausing the medication.**

GLP1-receptor agonists – patients with **impaired renal function** should be advised to prevent dehydration (i.e. by sipping small amounts of fluids frequently during the day) when experiencing the possible gastro-intestinal side effects (i.e. diarrhoea or vomiting) during initiation or dose escalation to prevent further renal deterioration.

Patient Counselling

- Explain what dehydration is and the conditions that can cause this e.g., vomiting, diarrhoea, fever (high temperature, sweats, shaking).
- Certain medications need to be stopped during severe illness.
- Explain which medicine(s) affect the individual patient.
- For over-the-counter cough, cold & flu products, patients should seek advice from their community pharmacy team.
- Provide the sick day rule card (Appendix 1), ticking the relevant medicine(s).

References

- Trend, Diabetes. (n.d.). TYPE 2 DIABETES: WHAT TO DO WHEN YOU ARE ILL. Https://Trenddiabetes.Online. Retrieved 6 September 2022, from: https://trenddiabetes.online/wp-content/uploads/2025/08/A5_T2Illness_TREND.pdf

- Trend, Diabetes. (n.d.). TYPE 1 DIABETES: WHAT TO DO WHEN YOU ARE ILL. Https://Trenddiabetes.Online. Retrieved 6 September 2022, from https://trenddiabetes.online/wp-content/uploads/2022/03/A5_T2Illness_TREND.pdf

- Derbyshire Medicine's Management Patient Information Leaflet http://www.derbyshiremedicinesmanagement.nhs.uk/assets/Patient_information_leaflets/Medicines_and_your_kidneys.pdf

- The leaflet listed as Appendix 1 (https://www.nottsapc.nhs.uk/media/1876/sick-day-rules-patient-leaflet.pdf) was developed with permission from Chesterfield Royal Hospital Foundation Trust, part of NHS Derby & Derbyshire ICS.

Appendix 1

Medicines and your kidneys
PATIENT INFORMATION LEAFLET

You have been given this leaflet because you take the following medicine(s):

	Type of medication	Your medication
☐	**ACEi:** (names ending in "pril") e.g. ENALAPRIL, LISINOPRIL	• .....
☐	**ARB:** (names ending in "sartan") e.g. CANDESARTAN, IRBESARTAN,	• .....
☐	**MRA:** water tablets ending in "one" e.g. SPIRONOLACTONE, EPLERENONE	• .....
☐	**NSAID:** anti-inflammatory pain killers e.g. IBUPROFEN, DICLOFENAC	• .....
☐	Water tablets ending in "mide" or "zide" e.g. FUROSEMIDE, BUMETANIDE	• .....
☐	**SGLT2** inhibitors: (names ending in "gliflozin") e.g. DAPAGLIFLOZIN, EMPAGLIFLOZIN	• .....
☐	**METFORMIN** e.g. METFORMIN, METFORMIN SR, GLUCOPHAGE, SUKKARTO SR	• .....

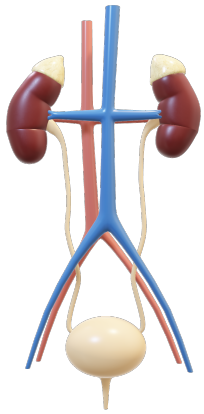
Why have I been given this leaflet?
The medicine(s) above are right for your medical condition. However, if your body becomes short of fluid (dehydration), this medicine can sometimes stop your kidneys from working as they should. The most common reasons for becoming dehydrated are:
Vomiting, diarrhoea, high temperatures or fevers, and not being able to drink normally.



If you develop diarrhoea, vomiting or high fevers or are not able to drink a normal amount of fluid, you should temporarily stop taking the medicine(s) named above. This is to help protect your kidneys. Once you are better and can drink normally, you should restart your medicine(s). For most people this is within 48 hours.

If you are not improving after 48 hours, contact your doctor, nurse or pharmacist for advice. NHS 111 is available 24 hours a day, 365 days a year, to provide information about health.

Is there anything else I should do when I am dehydrated?
You **can** take paracetamol for pain relief or for a high temperature. **Avoid** anti-inflammatory drugs (a type of pain killer) while you are dehydrated. Examples of these medicines are Ibuprofen, Diclofenac or Naproxen.



What else is important when I am taking this medicine?
If you are going into hospital for treatment, tell the staff looking after you about this medicine and show them this leaflet. This is particularly important if you are having an operation or some types of scan as your medicines may need to be stopped before your procedure.

Who is giving you this advice?
This advice comes from consultant kidney specialists, to try to prevent patients developing kidney problems.

To find out more about dehydration and your kidneys, see the NHS Choices website at www.nhs.uk. NHS 111 is available 24 hours a day, 365 days a year, to provide health information. Just call 111.