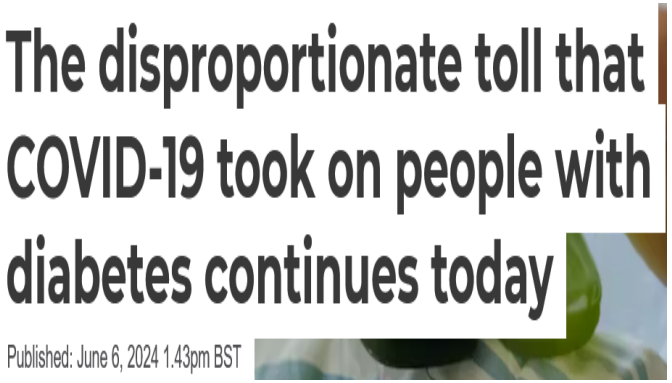
Sick Day Rules

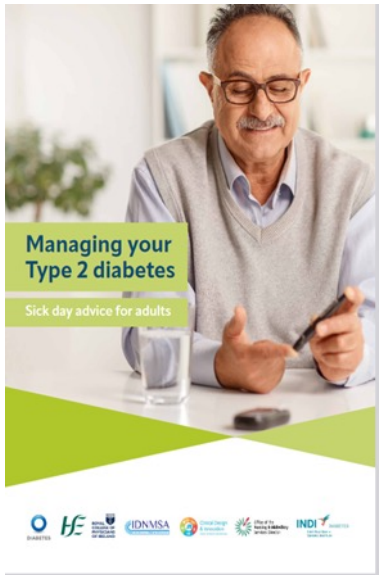
Joanne Lowe
CNS Diabetes / Nurse Lead NCP Diabetes
June 2024

What happens when people living with diabetes become unwell ?

- Illness and infections, as well as other forms of stress, can raise glucose levels, even if you are eating less than usual. When people living with diabetes are unwell, their bodies react by releasing hormones to fight the illness which can cause blood glucose and ketone levels to rise
- People who have diabetes can't always produce more insulin to cope with this change
- Vomiting and /or diarrhoea may lead to hypoglycaemia
- Risk of dehydration
- These can lead to poorer outcomes and increased hospital admissions



3 new national resources for adults with diabetes



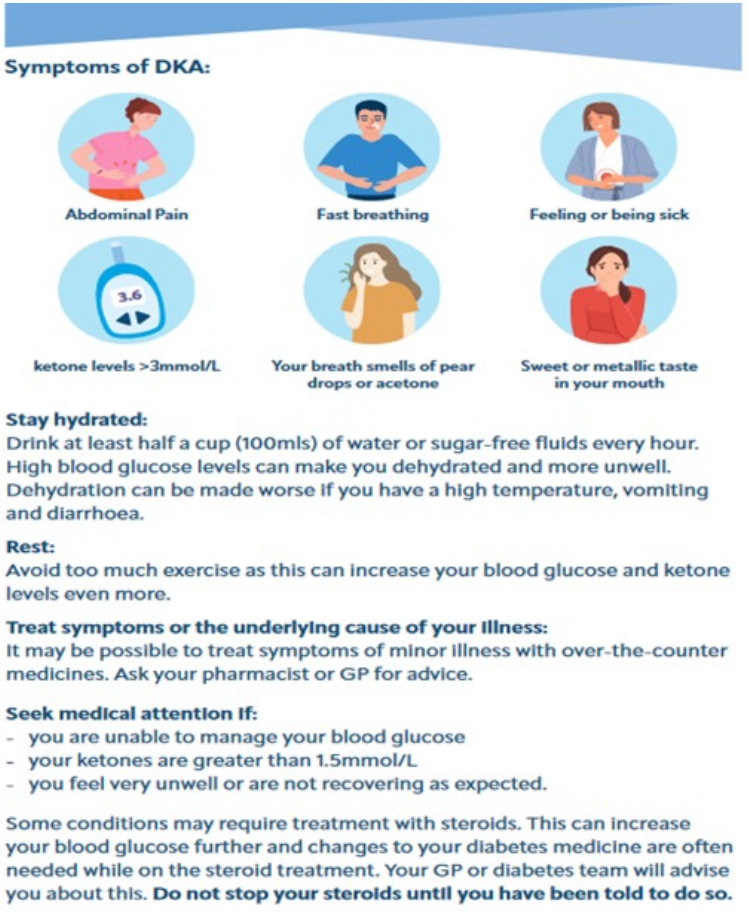
/

How and why?

- First time for the NCP undertaking this piece of work
- Adapted from the TREND UK and PCDS documents as they had experience with this which we could learn from.
- Nationally agreed from the national working group for diabetes for the Irish setting.
- Standardised management of issues that can occur during times of illness.
- Therapies available for Diabetes has increased over the years and have associated issues that people living with diabetes need to be aware of.
- When to escalate care and how to avoid potential hospital admissions
- Clinicians who do not specialise in Diabetes have a point of reference

Type 1 Diabetes

- Self management when unwell
- Blood glucose & ketone monitoring
- Food and fluid replacement
- Insulin adjustment
- Recognition of emergency situations e.g. DKA / hypoglycaemia
- When to seek help
- At present there is not a version specifically for people using Insulin pumps



Symptoms of DKA:

Abdominal Pain | Fast breathing | Feeling or being sick

ketone levels >3mmol/L | Your breath smells of pear drops or acetone | Sweet or metallic taste in your mouth

Stay hydrated:
Drink at least half a cup (100mls) of water or sugar-free fluids every hour. High blood glucose levels can make you dehydrated and more unwell. Dehydration can be made worse if you have a high temperature, vomiting and diarrhoea.

Rest:
Avoid too much exercise as this can increase your blood glucose and ketone levels even more.

Treat symptoms or the underlying cause of your illness:
It may be possible to treat symptoms of minor illness with over-the-counter medicines. Ask your pharmacist or GP for advice.

Seek medical attention if:
- you are unable to manage your blood glucose
- your ketones are greater than 1.5mmol/L
- you feel very unwell or are not recovering as expected.

Some conditions may require treatment with steroids. This can increase your blood glucose further and changes to your diabetes medicine are often needed while on the steroid treatment. Your GP or diabetes team will advise you about this. **Do not stop your steroids until you have been told to do so.**

Type 2 Diabetes

- Blood Glucose monitoring
- Managing oral medication
- Managing Insulin
- Recognition of emergency situations

  e.g. hypos and Euglycaemic DKA
- When to seek further help

Managing your diabetes medicines

If you are unwell contact your diabetes team, your GP or your community pharmacist without delay for further advice about your medicines.

In most circumstances when you are unwell you should continue to take your regular medicines as prescribed. Sometimes you may need more or less of your current medicines.

You may need to temporarily stop **(see below)** some of your medicines until you are feeling better, this includes metformin and SGLT2i.

This is especially important if you can't keep food or water down or if you are having surgery or a procedure. You must contact your Diabetes team or GP for specific advice.

Metformin:
This is sometimes known by other names including **Glucophage** and **Metaphage.**

SGLT-2i medicines:

- **Canagliflozin© (Invokana** or combination drug Vokanamet),
- **Dapagliflozin© (Forxiga**, or combination drug called Xigduo),
- **Empagliflozin© (Jardiance** or combination drug called Synjardy),

Advice for clinicians

- Advice on Type 1 and Type 2 diabetes
- Safe adjustment of Insulin
- Emergency situations including DKA /HHS/Hypoglycaemia

General advice for managing diabetes during intercurrent illness	
S (Sugar)	• Blood glucose levels can rise during illness even if the person is not eating • Advise to increase blood glucose monitoring if the person has access to it • Diabetes medications (sulfonylureas and insulin doses) may need to be increased temporarily during illness to manage raised glucose levels
I (Insulin)	• NEVER stop insulin or oral diabetes medications* • Insulin doses usually need to be increased during illness, especially if ketones are present • Specific advice for people on insulin therapy is presented overleaf
C (Carbohydrate)	• Ensure the person maintains hydration and carbohydrate intake • If the person is not able to eat or is vomiting, advise to replace meals with sugary fluids • If blood glucose levels are high, maintain fluid intake with sugar-free fluids • If blood glucose levels are low, encourage regular intake of sugary fluids
K (Ketones)	• In type 1 diabetes, advise to check for ketones every 4–6 hours. If present, check every 2 hours • In type 1 diabetes give extra rapid-acting insulin doses (in addition to regular doses) based on total daily insulin dose if ketones are present – refer to tables on page 6 & 7 • Advise to drink plenty of water to maintain hydration and flush through ketones • Test ketones in type 2 diabetes if on SGLT2 medication even when blood glucose is normal

SADMAN rules: There are several classes of drugs that should be temporarily stopped in conditions that could lead to complications	
S SGLT2 inhibitors	If taken during an acute illness that can lead to dehydration, there is an increased risk of developing euglycaemic DKA
A ACE inhibitors	If taken during an acute illness that can lead to dehydration, there is an increased risk of developing AKI due to reduced renal efferent vasoconstriction
D Diuretics	If taken during an acute illness that can lead to dehydration, there is an increased risk of developing AKI
M Metformin	If taken during an acute illness that can lead to dehydration, there is an increased risk of developing lactic acidosis
A ARBs	If taken during an acute illness that can lead to dehydration, there is an increased risk of developing AKI
N NSAIDs	If taken during an acute illness that can lead to dehydration, there is an increased risk of developing AKI due to reduced renal afferent vasodilation

Once the person has recovered and able to eat and drink for 24–48 hours, **these medicines should be restarted.**

The role of the Pharmacist

- As pharmacists you have a very important role for education and advice. Regular contact and enduring relationships with people who have diabetes,
- Likely point of early contact during times of illness e.g. over the counter treatments or for prescriptions such as antibiotics.
- Also available for other types of health promotion e.g. vaccinations
- Where can I find these resources ? https://www.hse.ie/eng/about/who/cspd/ncps/diabetes/resources/education

(No paper version available so keep it on your desk top)

- Feedback to the NCP would be welcome for the next version

Thank you