



**Diabetes  
Training**



# **Community nursing teams**



## 1 The Person

Listen to the person: they live with their diabetes 365 days a year.

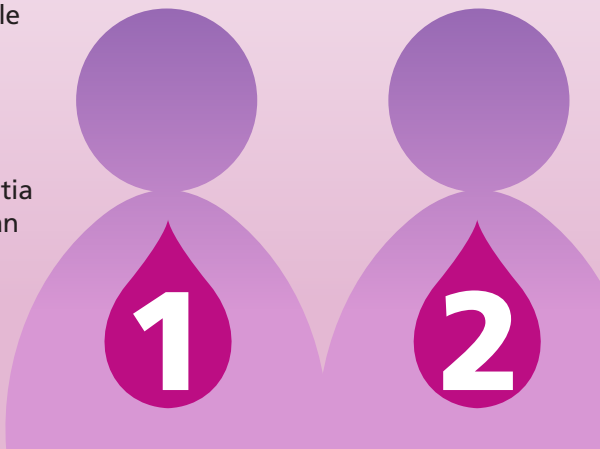
- z Don't blame people for their diabetes: ethnicity and family history are important factors for type 2 and type 1 is an autoimmune condition.
- z Diabetes is a challenging condition which can impact wellbeing.
- z You may be the only health care professional involved, your input could be key to ensuring effective self-care.



## 2 Know the difference between the types of diabetes

People with type 1 diabetes need insulin every day of life: even in the last phase of life to prevent diabetic ketoacidosis (DKA).

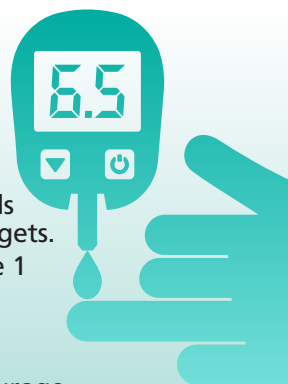
- z People with type 2 diabetes may be on diet alone, diet plus tablets, injectable therapies, insulin or a combination of these.
- z You are more likely to develop type 2 if you have a parent or sibling with the condition.
- z It is 2 to 4 times more common in South Asian, African-Caribbean and Black African groups.
- z Serious mental illness (SMI) and learning disability (LD) are linked to high rates of type 2 diabetes and reduced life expectancy.
- z A high prevalence of people with SMI are unaware of their diabetes: screen for undiagnosed diabetes.
- z People with diabetes have an increased risk of dementia and those with dementia an increased risk of diabetes.
- z Up to one million people in the UK are living with undiagnosed type 2 diabetes.



### 3 Blood glucose and ketone monitoring

Blood glucose levels should be checked more frequently if the person is unwell.

- z Blood glucose checks should be pre-meal where possible.
- z May not be needed if on diet or metformin only with optimised blood glucose.
- z Blood glucose targets should be tailored to the needs of the individual: see the care plan for individual targets.
- z Check ketones (blood or urine) in patients with type 1 diabetes regardless of blood glucose if unwell.
- z Check ketones in patients if on an SGLT2 inhibitor (Cana-/Dapa-/Empa-gliflozin) if unwell.
- z If unwell check blood glucose more often and encourage sugar-free fluids to prevent dehydration and acute kidney injury.
- z Review blood glucose and take action quickly via GP or diabetes care provider if blood glucose is less than 4mmol/l or in double figures.



### 4 Hypoglycaemia – low blood glucose below 4mmol/l (4 is the floor)

Low blood glucose can kill and must be treated immediately.

- z Know your hypoglycaemia treatment pathway:  
**Patients conscious and able to swallow safely:**  
**Step 1:** Give fast acting glucose e.g. glucogel or a small can/carton of non-diet sugary drink.  
**Step 2:** Give a starchy snack: e.g. 2 digestive biscuits.  
**If unable to swallow safely or unconscious:**  
Place in recovery position and call 999.
- z **Symptoms:** sweating, pale, shaky drowsy, frequent falls, confusion, aggression, seizures, loss of consciousness.
- z Some signs can be mistaken for psychiatric symptoms.
- z **Risk factors:** frailty, reduced appetite, dementia, kidney or liver disease, haemodialysis, terminal illness, type 1 diabetes/insulin treatment, sulphonylureas treatment, alcohol consumption.
- z Hypoglycaemia can be caused by insulin and medication errors. Always check right medication, insulin, time and dose.
- z Ensure hypo treatment is always available and within reach of the person.
- z If your patient is having unexplained, recurrent or severe hypoglycaemic episodes: request an urgent diabetes review to prevent reoccurrence.



5

## Hyperglycaemia (high blood glucose consistently in double figures)

High blood glucose can kill if left untreated, especially in type 1 diabetes.

- z **Symptoms:** thirst, polyuria, blurred vision, drowsy, infections, weight loss, incontinence.
- z **Causes:** infection, other illnesses, missed medication or insulin, surgery, undiagnosed diabetes.
- z **Risk factors:** steroids (including dexamethasone) and anti-psychotics can increase glucose levels even without diabetes. Always screen for diabetes or check blood glucose.
- z **Ketones:** check ketones (blood or urine) in people with type 1 diabetes regardless of blood glucose if unwell.
- z High blood glucose increases the risk of infection and hospital admission.
- z Urgently request diabetes review and management plan if blood glucose is high for more than 24 hours.
- z Check blood glucose more often and encourage sugar-free fluids to prevent dehydration and acute kidney injury.
- z Blood glucose targets should be tailored to the needs of the individual.
- z Ensure you and your patients know about sick day rules for type 1 and type 2 diabetes.
- z A long duration of high blood glucose can cause complications of the heart, kidneys, eyes, nerves, feet and brain.



## 6 Insulin and medication safety

Insulin is a high-risk drug.

- z Ensure the right person, right insulin, right dose, right time, right device every time.
- z Know common insulin types, ensure they are prescribed and injected correctly.
- z Be aware that insulin names are often similar and can be confused such as "Humalog, Humalog mix 25 etc.
- z Stopping insulin or diabetes medication without review can result in harm.
- z Insulin can remain at room temperature for up to one month but will become damaged if exposed to frozen or very hot temperatures.
- z **Both overdose and omission of Insulin can be used to self-harm and even commit suicide: include in care and risk plans.**

Know common diabetes medications and side effects: ensure they are prescribed and taken correctly.

- z If unwell, SGLT2 inhibitors (Cana-/Dapa-/Empa gliflozin) should be stopped immediately and metformin dose reviewed.
- z Be familiar with local prescribing guidelines.
- z Consider whether the person's mental state is affecting their ability to self-medicate.
- z Alert the GP, pharmacist or diabetes care provider without delay if diabetes medication is stopped or refused.
- z Seek urgent advice from GP or diabetes care provider if blood glucose is less than 4mmol/l or in double figures.



## 7 Feet (See Touch the Toes Test)

All people with diabetes should have regular foot examinations (at least annually).

- z A foot ulcer is a medical emergency requiring urgent same day referral for specialist assessment.
- z Do a “touch the toes” test – for reduced sensation.
- z Refer to the GP, podiatrist or specialist team if there is a problem.
- z Advise people to check their feet, be aware of sensation loss, look for changes in the shape of their feet and wear shoes that fit properly.



## 8 Eating with diabetes

If the individual is unwell and unable to eat; ensure they take sugar free fluids through the day.

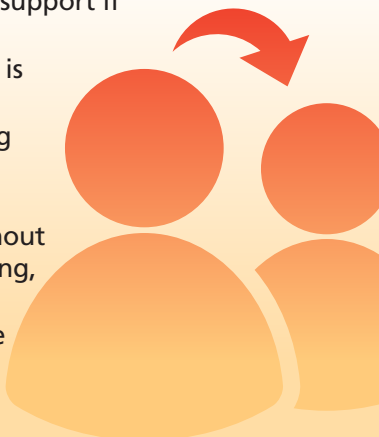
- z There is no special diet for people with diabetes.
- z Meal plans should be individualised: this will depend on the person’s type of diabetes, age, weight, gender, ethnicity and economic circumstance.
- z All carbohydrate foods and drinks break down into glucose, impacting blood glucose.
- z People living with type 1 diabetes should have access to specialist support with carbohydrate counting: matching insulin doses to carbohydrate.
- z Dietary restriction is inappropriate for elderly frail people.
- z The priority is to ensure adequate nutrition and quality of life.
- z Nutrition and hydration are essential for wound and ulcer healing.
- z Be mindful that people may use food to manage distress and to express love.



## 9 Referring to the GP, diabetes care provider, mental health or podiatry team

People with type 1 diabetes should have access to specialist support.

- z Your patient should have access to specialist support if needed or requested.
- z Alert diabetes care provider if blood glucose is very high or low.
- z A foot ulcer is a medical emergency requiring urgent same day referral for specialist assessment.
- z Contact GP, podiatrist, or specialist team without delay for new foot symptoms, redness, swelling, hot, pain, infection or any foot wound.
- z Liaise with GP or diabetes care provider if the person's mental state is affecting their ability to self-medicate.



## 10 Ensure the person has access to diabetes information, diabetes care and review

- z People on anti-psychotic medication or steroids (including dexamethasone) should be screened for diabetes.
- z Screen everyone with SMI and LD for undiagnosed diabetes.
- z Everyone with diabetes should have annual blood tests, blood pressure, eye and foot checks.
- z Everyone with diabetes should have access to information/training about their diabetes, dietetic advice, specialist advice (if needed), smoking cessation advice and vaccination programmes.
- z Non-attendance of annual checks can be a sign of self-neglect.
- z Be aware of Sick Day Rules for **type 1** and **type 2** diabetes, this is information about what to do when the person is unwell and blood glucose is high.
- z Some people have achieved partial or full remission of their type 2 diabetes, for more information visit:  
[www.knowdiabetes.org.uk](http://www.knowdiabetes.org.uk)  
[www.diabetes.org.uk](http://www.diabetes.org.uk)



## Touch the toes test

### Does your patient with diabetes have reduced sensation?

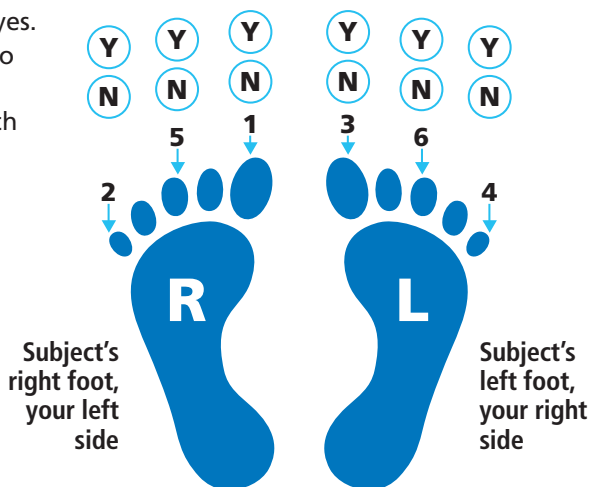
Ask them to close their eyes.

- z Tell them you are going to touch their toes.
- z Ask them to tell you which foot you touched, left or right.
- z Touch toe number 1 for two seconds gently.

**Do not repeat.**

Continue until you have assessed 6 toes as marked on the diagram.

- z If they cannot feel 2 or more toes they have **reduced sensation** for their foot check.



(The Ipswich Touch Test reproduced with permission from Diabetes UK)

**All people with diabetes must have a foot check within 24 hours of admission to hospital or care home.**

**Check feet daily for any new problems while assisting with personal care.**

## CHECK

Remove socks/dressings/bandages.

- z Is there an active foot problem – ulcer, gangrene, black necrotic tissue or toes?
- z Is there reduced sensation? Follow 'Touch the toes test'.
- z Document your foot check in the patient's notes and escalate to the GP or local podiatry team if there is a problem.



## PROTECT

- z Apply new dressings/bandages (using patient's care plan).
- z Protect heels with heel off-loaders for bed-bound patients.
- z Offload heels for those with any active foot ulceration.
- z Check feet daily for any new problems while assisting with personal care.



## REFER

If your patient has **reduced sensation** they may be at risk of a diabetic foot ulcer.

- z Ask the GP for a full foot examination, they may need to be referred to a diabetes specialist podiatrist, foot protection team, or a diabetes foot clinic.







See [www.knowdiabetes.org.uk](http://www.knowdiabetes.org.uk)

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