

Type 1 diabetes in children and young people

Information for the public

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Type 1 diabetes in children and young people: the care you should expect

This information is about type 1 diabetes. We have written separate [information about type 2 diabetes](#).

Type 1 diabetes causes people to have too much sugar (glucose) in their blood. It is caused when the body cannot make enough of a hormone called insulin, which controls how much sugar is in the blood.

Diabetes puts people at risk of serious health problems with blood vessels (for example, stroke), eyes, feet, gums, heart, kidneys and nerves.

It is a lifelong condition that can affect everyday life. People with type 1 diabetes will need:

- to have a healthy lifestyle (which may mean changing their diet)
- to take insulin to control their blood sugar level

- regular check-ups.

We want this guideline to make a difference to children and young people with type 1 diabetes by making sure they, and their family and carers:

- get all the help they need to manage their diabetes, including medicines, education, and advice on diet and exercise
- are involved in decisions about their care, such as choosing an average blood sugar target (called a HbA1c level) – the target is usually 48 mmol/mol (or 6.5%), but for some people a different target can be better
- are offered continuous glucose monitoring devices to regularly check their blood glucose
- are encouraged to see a dentist regularly, to get checked for [gum disease](#)
- are taught how to stop their blood sugar levels from getting too high (hyperglycaemia, or a hyper) or too low (hypoglycaemia, or a hypo), and how to manage hypers and hypos when they happen
- know what to do if their diabetes gets out of control and they think they have diabetic ketoacidosis (a serious illness that needs to be treated in hospital).

Making decisions together

Decisions about treatment and care are best when they are made together. Your healthcare professionals should give you clear information, talk with you about your options and listen carefully to your views and concerns.

To help you make decisions, think about:

- What matters most to you – what do you want to get out of any treatment or care?
- What are you most worried about – are there risks or downsides to the treatment that worry you more than others?
- How will the treatment affect your day-to-day life?
- What happens if you do not want to have treatment?

If you need more support to understand the information you are given, tell your healthcare professional.

We have also written a guideline on [improving the experience of healthcare for babies, children, young people and their families and carers](#).

Families and carers can find more information on the [NHS website on caring for children and young people](#).

Read more about [making decisions about your care](#).

Younger children can find out more about type 1 diabetes by watching this [short video](#) from Diabetes UK.

Your type 1 diabetes team

You will have a team of people looking after you. They will work with you and with your parents or carers, so that you can all help to manage your diabetes. They will all be experts in looking after children and young people with type 1 diabetes. There will be doctors and nurses, and people who can tell you about how eating and drinking affects your diabetes (dietitians). Your diabetes team may also include a psychologist (someone who looks after your emotional and mental health).

You should normally expect your diabetes team to follow the advice NICE has given. However, they might sometimes need to do things differently if this advice is not right for you (for example, if a certain treatment does not work for you). They should explain to you why your care is different to what is in this information.

Younger children can find out more about the [diabetes team on the Diabetes UK website](#).

What your type 1 diabetes team will do

Your diabetes team should tell you about type 1 diabetes and how to test your blood, inject insulin and look out for problems.

Your diabetes team should meet with you at the diabetes clinic 4 times a year to check how you are doing.

If you have questions or are worried about your diabetes, you can ask your team for help. You should be given a phone number you can use to call your diabetes team. If you need help urgently, you should be able to call them at any time of the day or night.

Younger children can find out more about the [diabetes clinic on the Diabetes UK website](#).

Involving your parents or carers in your care for type 1 diabetes

Your diabetes team will also talk to your parents, or other carers if you have them, and give them information. This is so they can help you understand about the care you will have and talk with you about what you want. If you're under 16, your parents or carers will usually need to agree to the treatments (give consent).

If you do not want your parents or carers involved and it's clear you understand all the information, you and your diabetes team can decide what care you should have. Your team should ask about this again from time to time in case you change your mind.

Younger children can find out more about [getting their family involved on the Diabetes UK website](#).

Finding out if you have type 1 diabetes

If your doctor thinks you might have type 1 diabetes, you should be offered a finger-prick blood test. On the same day, you should also see a diabetes team who look after children and young people.

You may need more tests to find out if you have diabetes. Your diabetes team will tell you about any other tests you need.

Younger children can learn [how to tell if you or someone else has diabetes on the Diabetes UK website](#).

Questions to ask about tests

- Can you tell me more about the tests for diabetes?
- Where will I have these tests? Will I need to have them in hospital?
- How long will I have to wait until I have these tests?
- How long will it take to know if I have diabetes or not?

Insulin for type 1 diabetes

Injecting insulin

Everyone with type 1 diabetes needs to take insulin. Insulin cannot be taken as a tablet and has to be injected. Your diabetes team will teach you how to inject yourself.

There are different ways to inject insulin. You could inject it with a syringe or an insulin pen, or you might have an insulin pump. Your diabetes team should help you to choose the way that works best for you. They should also check that this way is still working for you in the future.

Younger children can find out more about [insulin and how to inject it on the Diabetes UK website](#).

Insulin pumps

An insulin pump is a small machine with a tube that goes under your skin. It gives you insulin throughout the day, so that you do not need to inject yourself. You can change how much insulin it is giving you by pressing buttons on the machine.

A pump is not right for everyone. You and your diabetes team should decide which way of giving insulin is best for you. You can find [information about who should have an insulin pump on the Juvenile Diabetes Research Foundation \(JDRF\) website](#).

Younger children can find out more about [insulin pumps on the Diabetes UK website](#).

You should be given special boxes (called 'sharps bins') to put your used needles and lancets (finger prickers) in. You should also be told how to get rid of these boxes when they are full and how to get new ones.

Your insulin routine

There are several different types of insulin. Some work quickly (called 'rapid-acting insulin') and some work more slowly (called 'long-acting insulin').

When you first get diabetes, you should be given a rapid-acting insulin to inject before eating and a long-acting insulin to inject once or twice a day. This is called 'multiple daily injections'. Your diabetes team will teach you when to inject your insulin, and how much to take.

Multiple daily injections are not right for everyone. If they are not right for you, you may be offered a different kind of insulin treatment. This will normally be an insulin pump. Your diabetes team will teach you how to use the pump.

If you've tried multiple daily injections and an insulin pump, and neither of these are keeping your diabetes under control, your diabetes team may want to see you more often or give you a different kind of insulin.

Questions to ask about using insulin

- Could you show me how to inject myself with insulin?
- Where on my body should I inject insulin?
- Will injecting insulin hurt?
- Is there any medicine I can have that I do not have to inject?
- Could you tell me more about the different ways of injecting insulin (for example, multiple daily injections or insulin pumps)?
- Will I feel any different when I start injecting insulin?
- How long will it take to start working?
- Are there any risks with injecting insulin?
- What will happen if I forget/stop injecting my insulin?
- Why does my insulin not work as well as it used to?
- Can you give me any written information? What websites are helpful?

Blood glucose

Blood glucose is the sugar in your blood. Your blood glucose has to be at the right level to keep you healthy, as you can get ill from having blood glucose that is too high or too low. People with type 1 diabetes need to inject insulin to get their blood glucose to the right level.

Lots of things can make your blood glucose levels go higher or lower. For example, your blood glucose levels can get too low if you:

- inject too much insulin
- do more exercise than you planned to do

- do not eat enough food.

Your blood glucose can get too high if, for example, you:

- do not inject enough insulin
- exercise when your blood glucose levels are already high
- are ill (for example, if you have the flu).

When your blood glucose goes too low, this is called hypoglycaemia (or a hypo for short). When your blood glucose goes too high, this is called hyperglycaemia (or a hyper).

Younger children can find out more about [hypoglycaemia](#) and [hyperglycaemia](#) on the [Diabetes UK website](#).

Checking your blood glucose

You should be offered a real-time continuous glucose monitor (rtCGM) so that you can be aware of your blood glucose level at any time. You and your diabetes team should choose a device together, based on your preferences and needs.

You should be offered an intermittent-scanning continuous blood glucose monitor (isCGM, also called 'flash') if you cannot use rtCGM, or if you prefer isCGM.

Both types of continuous glucose monitor work with a sensor that you wear on your skin, and a display monitor or smartphone that shows your blood glucose level. rtCGM devices automatically send regular readings to the monitor or smartphone. You need to scan isCGM devices yourself.

If you cannot or do not want to use rtCGM or isCGM, you should be offered finger-prick testing to check your blood glucose levels. To do this, you prick your finger to get a drop of blood. You put this blood onto a meter strip, insert the strip into a testing meter, and it tells you your blood glucose levels. If you are using finger-prick testing, it's important to check your blood glucose at least 5 times every day. Sometimes you may need to check it more often (for example, if you are ill, playing sports or doing other exercise, or will be driving that day).

Even if you use continuous glucose monitoring, you will need to do finger-prick tests from

time to time (for example, to check that your monitor is accurate). Your diabetes team will explain when you need to do finger-prick tests.

Your diabetes team will show you how to use the device or devices that you choose, and they will make sure you have enough testing strips.

Younger children can find out more about [checking blood glucose on the Diabetes UK website](#).

Questions to ask when choosing an rtCGM or isCGM monitor

- How accurate is the monitor?
- Can the monitor alert me when my blood glucose levels become too high or too low?
- Do I need a smartphone to use the monitor? Do I need to install a specific app?
- Is the device easy to use?
- Could this device connect with my insulin pump?
- Will wearing this device stop me doing any of the things I normally do as part of everyday life?
- How visible is the device? Can I wear it under my clothes?

Getting your blood glucose to the right level

Your diabetes team will help you manage your diabetes and get your blood glucose to the right level. They will help you decide:

- how much insulin you need
- when you should inject your insulin
- what kind of insulin works best for you

- how to change the amount of insulin you are injecting, so that you are taking the right amount for your blood glucose levels
- how much exercise to do
- what food and drink to eat.

Blood glucose is measured in mmol/litre (this means the millimoles of glucose in every litre of your blood). Millimoles are a unit of measurement, like litres or metres.

It's best to try to get your blood glucose to the level it would be if you did not have diabetes. This stops you getting problems like hypos, or problems that diabetes could cause you in the future (such as eye damage or gum disease). If possible, you should aim to get your blood glucose to these levels:

- When you wake up and before you have any food, between 4 mmol/litre and 7 mmol/litre.
- **For young people aged 17 and over who are going to drive:** at least 5 mmol/litre.
- Before a meal, between 4 mmol/litre and 7 mmol/litre.
- After a meal, between 5 mmol/litre and 9 mmol/litre.

You and your diabetes team will agree what level of blood glucose is best for you (your target level). Your target level might be the levels written above, or it might be higher than this. Your diabetes team should help you decide a target level that does not cause you problems (such as hypos), and help you reach it.

Questions to ask about blood glucose

- Could you show me how to measure my blood glucose?
- Why do you think I should have target blood glucose levels that are different to the best level?
- What could happen if I do not keep my blood glucose at my target level?
- Could you tell me more about how my blood glucose levels and diabetes affect driving?
- Can you give me any written information? What websites are helpful?

HbA1c

Your blood glucose levels tell you how much glucose is in your blood right now. HbA1c (also called 'glycated haemoglobin') tells you the average amount of glucose that has been in your blood for the last 2 or 3 months.

HbA1c is measured in mmol/mol (millimoles per mole). Millimoles and moles are units of measurement, like litres or metres. HbA1c is also sometimes written as a percentage (for example, 6.5%).

Like with blood glucose, it's best to have an HbA1c level that's as close as possible to the level it would be if you did not have diabetes. This level is 48 mmol/mol or less (this is the same as 6.5% or less). Keeping your HbA1c level under control means you're less likely to get other problems caused by diabetes. Your diabetes team should help you decide a target level that does not cause you problems (such as a lot of hypos), and help you reach it.

Your diabetes team should check your HbA1c level 4 times a year. They do this with a finger-prick test. If you are having problems with your blood glucose levels, they may check your HbA1c level more often.

When you start injecting insulin for the first time, you may find that you only need a small amount to keep your HbA1c at the right level. This is called a 'honeymoon period'. Over

time, you will find that you need more insulin to control your diabetes.

Questions to ask about HbA1c

- Why do you think I should aim for a HbA1c level that is different to the best level?
- What could happen if I do not keep my HbA1c at the level I'm aiming for?
- Can you help me to keep my HbA1c at the level I'm aiming for?
- Can you give me any written information? What websites are helpful?

Learning about type 1 diabetes

Your diabetes team should teach you all about type 1 diabetes. They should teach you:

- how to inject insulin
- how to check your blood glucose
- how food, drink and exercise affect diabetes
- what to do if you are ill (for example, if you have the flu)
- how to spot low blood glucose levels (called hypoglycaemia, or a hypo for short) and high blood glucose levels (called hyperglycaemia), and what to do when this happens.

What they teach you should be based on:

- what you want to learn and how you want to be taught
- how well you are coping with having diabetes
- how old you are
- how much you already know about diabetes
- what you want to do and achieve in your life.

Your diabetes team should always check that you understand everything they tell you.

This includes if you need the information provided in a different way (for example, if you do not understand English very well or you have a health condition that makes it hard to understand things). You can also ask any questions you have about diabetes.

Your diabetes team should also tell you about living with diabetes. This includes:

- getting flu jabs
- telling you that you should see the optician as often as people without diabetes
- telling you that you should see the dentist regularly, because you are more likely to get [gum disease](#)
- what benefits people with diabetes can get from the government
- how other groups (such as charities) can help
- the dangers of smoking when you have diabetes, and how to get help to stop smoking
- how drugs (including alcohol) affect diabetes
- making special plans if you want to do certain activities (such as scuba diving) or travel a long way (for example, when to eat and inject your insulin when you cross different time zones).

Younger children can find out more about [living with diabetes on the Diabetes UK website](#).

Questions to ask about what you are taught

- Can you tell me more about type 1 diabetes?
- Can you tell me more about things I'll have to change in my life now I have type 1 diabetes?
- Can you give me the contact details (such as a phone number) for the diabetes team?
- Can you give me any information in another language?
- Can you give my parents or carers any information?

Food and drink

Your diabetes team should help you understand how the food you eat can affect you. They should show you how to count the carbohydrates ('carbs') in your food and drink. This is to make sure you are injecting the right amount of insulin to keep your blood glucose at your target level.

People with diabetes have a higher chance of getting illnesses such as heart disease later in their lives. To avoid these problems, your diabetes team should help you plan healthy meals and snacks.

You should try to eat at least 5 portions of fruit and vegetables a day. Your diabetes team will explain how much is in a portion.

Younger children can find out more about [what foods to eat on the Diabetes UK website](#).

Exercise

Exercise (such as playing sports) can help keep you healthy. People with type 1 diabetes can do any kind of exercise.

When you are exercising, you may need to eat more or have a snack before, during and after exercise. You may also need to inject more or less insulin, and at different times. This is to help keep your blood glucose levels at their target level.

You should check your blood glucose before and after exercise, so you know when you need to eat more or inject less or more insulin.

Your diabetes team should teach you how to exercise safely.

Younger children can find out more about [exercise on the Diabetes UK website](#).

Low blood glucose (hypoglycaemia) in type 1 diabetes

Hypoglycaemia (usually called a hypo) means your blood glucose levels are too low (below

4 mmol/litre). This needs to be treated straight away by eating or drinking something with fast-acting glucose in it (see the box below for examples). If it is not treated quickly, it can make you ill.

Your diabetes team should teach you how to tell when your blood glucose levels are getting low, what to do about it, and how to stop it happening too often.

Younger children can find out more about [hypoglycaemia on the Diabetes UK website](#).

Recognising a hypo

- The first signs are usually feeling hungry, sweaty and dizzy.

Treating a hypo

- You can treat it by taking glucose (for example, glucose tablets or a small can of lemonade).
- You should always have a blood glucose testing kit and some glucose with you, to check if you are getting a hypo and to treat it if you are.
- Chocolate, biscuits and ice cream are not good at treating hypos, as the glucose in them works too slowly.
- Your blood glucose levels should start to get better in 15 minutes if you take some glucose. If not, you should take some more glucose.
- If you cannot treat it yourself (for example, because you're too dizzy or having trouble staying awake), a family member, friend or carer may need to help you.
- Your diabetes team will tell you what your family, friends or carers can do to help.

Treating a bad (severe) hypo

- If you are awake but cannot eat or drink easily, you may need to take Glucogel or glucagon.
- Glucogel is a special gel that you put in your mouth, onto the inside of your cheeks. You can have this instead of other kinds of glucose if you need a quick treatment.
- You shouldn't have Glucogel or anything else put in your mouth if you're having trouble staying awake because of the hypo, because this could make you choke.
- If you are having trouble staying awake or have passed out, you may be given a glucagon injection.
- Your family or carers should know how to give you glucagon injections.

- Your blood glucose levels should get better after 10 minutes if you have had glucagon. If they do not, your family or carers should call an ambulance.

If you are having trouble staying awake or have passed out

- If you cannot have Glucogel or other kinds of glucose, and you're not with anybody who knows how to give you a glucagon injection (for example, if you're at school), the people you're with should call an ambulance.

Recovering from a hypo

- If you have an insulin pump, then after you start to recover from a hypo:
 - You should re-check your blood glucose and give yourself insulin if you are having a planned snack or meal.
 - You do not need to do anything else if you are not having a planned snack or meal.
- If you do not have an insulin pump, then after you've started to recover from a hypo, you should either:
 - have a snack or a meal if you have one planned or
 - have a kind of food called 'long-acting complex carbohydrates' (for example, bread or a cereal bar).

Your diabetes team will tell you if you need to do anything else after you recover from a hypo.

Questions to ask about hypoglycaemia

- Could you teach me how to tell if I'm getting a hypo?
- What kind of snack should I have if I'm getting a hypo?
- How do I use Glucogel?

High blood glucose (hyperglycaemia) in type 1 diabetes

When your blood glucose levels are too high, this is called hyperglycaemia. High blood glucose levels can cause problems such as making you thirsty or making it hard to concentrate. If your blood glucose levels are too high for a long time, this can cause other problems (such as eye, gum and kidney damage).

Younger children can find out more about [hyperglycaemia on the Diabetes UK website](#).

When you are ill

It can be difficult to keep your blood glucose at your target level when you are ill, so your diabetes team should teach you what to do when this happens. They should give you rules (called 'sick-day rules') you can follow to help keep your blood glucose at the right level, and tell you when to call them for help. They should remind you about this every year, and more often than that if you need more help.

Younger children can find out more about [what to do when you are ill on the Diabetes UK website](#).

Questions to ask about hyperglycaemia

- Can you tell me when I should measure my blood glucose level more often than usual?
- What should I do if my blood glucose levels are too high?

Checking your blood ketones

If you are ill, or if you are not getting as much insulin as you need, you could get high blood glucose levels. When you have high blood glucose levels, your body sometimes makes chemicals called ketones. If your body makes a lot of ketones, this can be bad for you and you could get a very serious illness called [diabetic ketoacidosis](#) (or DKA for short).

Your diabetes team should have given you a meter and blood ketone strips to check your blood ketone levels. To make sure you do not get diabetic ketoacidosis, you should check your blood ketone levels when you are ill or when you have a high blood glucose level. Your diabetes team will show you how to do this. Your diabetes team should tell you not to use out-of-date strips. You should always have some strips at home to use if you get ill.

If you do have high blood ketone levels, your diabetes team will tell you how you should treat them and when you should get help.

Blood ketones are measured in mmol/litre (millimoles per litre). Your blood ketone level should be below 0.6 mmol/litre. If the level is above 1.5 mmol/litre, you should speak to your diabetes team straight away.

Younger children can find out more about [checking blood ketones on the Diabetes UK website](#).

Questions to ask about blood ketones

- Could you show me how to measure my blood ketones?
- Can you tell me more about when I should measure my blood ketones?
- What should I do if my blood ketone levels are too high?

Diabetic ketoacidosis

Diabetic ketoacidosis happens if your blood ketone levels get too high. This can happen if you have an illness that gives you high blood ketone levels, or if you forget to inject your insulin. Most people with diabetes never get diabetic ketoacidosis, and you can avoid it by measuring your blood ketone levels and treating them when they get too high.

Finding out if you have diabetic ketoacidosis

If you have high blood glucose levels and any of these problems, you might have diabetic ketoacidosis:

- feeling or being sick (nausea and vomiting)
- pains in your stomach
- feeling out of breath
- feeling dehydrated (your body does not have enough water in it)
- finding it hard to stay awake.

If you have any of these problems, you should check your blood ketone levels straight away. If your blood ketone levels are more than 3 mmol/litre, then you are likely to have diabetic ketoacidosis and you should contact your diabetes team straight away and go to hospital.

If you have any of the problems above but do not have a blood ketone tester or any spare strips, or the strips are out of date, you should contact your diabetes team for advice straight away.

If your diabetes team thinks that you have diabetic ketoacidosis you should be taken to a hospital that looks after children and young people.

Diabetic ketoacidosis is a serious illness and needs to be treated in hospital.

When you get to hospital

When you are in hospital you will be looked after by a team of people (your 'hospital team'). They will do tests to find out if you have diabetic ketoacidosis.

They should tell you about diabetic ketoacidosis and what care and treatments you will need. If you are having trouble staying awake and are being sick, you may have a tube put into your nostril and down into your stomach (a nasogastric tube). This is in case you throw up, to stop the vomit getting into your lungs.

If you are very ill with diabetic ketoacidosis, you should have the special care in the box below.

Special care for children and young people with bad (severe) diabetic ketoacidosis, and children under 2 years old

- You will have a nurse who only cares for you and is with you all the time.

and

- You may be looked after in a special part of the hospital called a high-dependency unit. Here, you will have more checks than normal.

Parents and carers: all children under 2 with diabetic ketoacidosis should have this special care.

Your care in hospital

You will need fluids (water mixed with salt and other things your body needs) and insulin to get better from diabetic ketoacidosis.

Your hospital team should give you a drip that injects fluids and insulin straight into your veins (intravenous) over 1 or 2 days if you have any of these problems:

- finding it hard to stay awake
- feeling or being sick (nausea and vomiting)
- dehydration (your body does not have enough water in it).

You should be able to start drinking and giving yourself insulin when your diabetic ketoacidosis starts to get better.

If you do not have any of the problems above, you should be able to drink and give yourself insulin.

If you have an insulin pump, your hospital team should turn it off before giving you intravenous insulin. They will turn it back on when your diabetic ketoacidosis starts to get better.

Checking on you while you are in hospital

Your hospital team should check on you often while you are in hospital. They will do lots of tests to make sure you are getting better. These will be blood and urine tests. Your hospital team may need to place a tube in your bladder to help them do tests on your urine (for example, if you cannot go to the toilet on your own).

Your hospital team will do some tests (such as testing your blood glucose levels) every hour.

They will do some tests (such as testing your blood ketone levels) at least every 4 hours, and they should come to see you at least once every 4 hours.

If you are very ill with diabetic ketoacidosis, you should have some tests (such as checking how awake you are) and be seen by your hospital team more often.

Your hospital team should tell you often how you are doing.

Parents and carers: children under 2 years old with diabetic ketoacidosis should have some tests more regularly and should be seen by their hospital team more often.

Other problems caused by diabetic ketoacidosis

Diabetic ketoacidosis can cause other problems with your body. Your hospital team should check for these problems while you are in hospital. They should treat any problems you get.

One problem sometimes caused by diabetic ketoacidosis is swelling in the brain (also called 'cerebral oedema'). This is a serious problem and needs very quick treatment, so your hospital team will be checking for this often and they will treat it quickly and carefully if it happens.

Making sure you do not get diabetic ketoacidosis again

After you have recovered from diabetic ketoacidosis, it is important to try to stop it happening again. Your hospital team should talk to you about what might have caused it

(for example, if it happened because you were ill or had forgotten some insulin injections).

Your diabetes team should teach you and your family and carers how to try to make sure you do not get diabetic ketoacidosis again. They will teach you what to do when you are ill and how to measure your blood ketone levels again. They will also help you remember to inject all your insulin if you have been forgetting.

Younger children can find out more about [stopping diabetic ketoacidosis happening on the Diabetes UK website](#).

Questions to ask about diabetic ketoacidosis

- Could you tell me more about how to tell if I have diabetic ketoacidosis?
- Could you tell me more about the treatment you want me to have for diabetic ketoacidosis? How will it help me?
- How long will the treatment take to start working?
- Can you give me any written information? What websites are helpful?

Coping with type 1 diabetes

Diabetes can sometimes be hard to cope with. It can cause problems with your emotions (your mental health). You may feel depressed, anxious or nervous. You may have problems with your behaviour that you find hard to control or do not understand. You may have problems with eating food (such as eating too much and feeling bad about it) or injecting insulin.

Your diabetes team should regularly check you're feeling okay. You can talk to them if you are having difficulties. If you are finding it hard to cope, your diabetes team should make sure you can talk to people (such as psychologists) who help children and young people with this. They should make sure you do not have to wait a long time to talk to someone if you need help.

If you're having trouble keeping your blood glucose at your target level, your diabetes team

should check if you are feeling depressed or anxious or finding it hard to cope.

Younger children can find out more about [coping with diabetes](#) and [talking about diabetes](#) on the [Diabetes UK website](#).

Family problems

Having type 1 diabetes can sometimes cause problems between you and your family. You can talk to your diabetes team about any problems that diabetes is causing in your family, and they should get help for you and your family if you need it.

Questions to ask about mental health

- Could you tell me more about help I can get with mental health problems?
- What help can I get if my family and I are having problems?
- Could you tell me more about the treatment you want me to have for my mental health problem? How will it help me?
- How long will the treatment take to start working?
- Are there any other treatments I could have?

Other health problems

Health problems that are more likely

There are some health problems that people with type 1 diabetes are more likely to have. Your diabetes team should test for these. It's really important to get checked for these problems. This is because if you have any of them, it is better to get treatment as soon as possible.

Coeliac disease

People with coeliac disease get ill when they eat gluten (wheat). Gluten is found in bread, pasta, and other foods.

We have written separate [information about coeliac disease](#).

Younger children can find out more about [coeliac disease on the Diabetes UK website](#).

Thyroid problems

The thyroid gland is an organ in your body (like your heart or your lungs). It is in your neck.

You should have a check to see if you have problems with your thyroid when you find out that you have type 1 diabetes. You should have checks for thyroid problems every year.

Problems that are caused by type 1 diabetes

Diabetes can cause other problems with your body. These normally happen when you are an adult. Your diabetes team should start checking when you are young to see if you have any of these problems.

It's really important to get checked for these problems. This is because if you have any of them, it is better to get treatment as soon as possible.

You are much less likely to have these problems if your diabetes management is going well and you see your diabetes team at the clinic regularly.

Eye and kidney problems

You should have your eyes and kidneys checked for problems every year after you turn 12.

You only need checks after you turn 12 because children under 12 do not normally have problems with their eyes or kidneys.

Foot problems

We have written separate [information about foot problems caused by diabetes](#).

Gum disease

Type 1 diabetes means you are more likely to have gum disease (also called periodontitis).

It is important to have regular dental checks for gum disease. Your dentist can do this as part of your normal dental appointments, and they will tell you how often you need to come in.

If you do get gum disease, your dentist can treat it. Treating gum disease can also make it easier to manage your blood glucose and stop it getting [too high \(hyperglycaemia\)](#).

High blood pressure

High blood pressure can cause problems with your health.

You should have your blood pressure checked every year after you turn 12.

Questions to ask about other problems caused by diabetes

- Could you tell me more about why you're only checking my eyes and kidneys after I turn 12?
- Are there any other problems caused by diabetes that I should look out for?

Changes in your type 1 diabetes care when you become an adult

Children and young people have different diabetes teams to adults. When you become an adult, you will get a diabetes team that looks after adults. This normally happens when you turn 18, but it should happen when you are ready for the change. Your diabetes team may work with a young persons' or young adults' diabetes team when you are a teenager, to

make it easier for you to make the switch.

Before you switch to an adult diabetes team, your diabetes team should make sure that:

- you understand how adult care will be different
- you feel like you are ready for the change
- it does not happen when you have a lot going on in your life, like going to university or starting a job.

Other groups that can help with type 1 diabetes

- [Diabetes Research and Wellness Foundation](#)
- [Diabetes UK](#), 0345 123 2399
- [InDependent Diabetes Trust](#)
- [Input Me](#)
- [Juvenile Diabetes Research Foundation \(JDRF\)](#), 020 7713 2030

You can also go to the [NHS website](#) for more information.

NICE is not responsible for the quality or accuracy of any information or advice provided by these organisations.

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Accreditation

