



East of England Ambulance Service **NHS**
NHS Trust

Avoiding hypos

The East of England Ambulance Service was called to see you because of an emergency call to treat you for a hypoglycaemic episode or hypo (*a very low blood sugar*).

Having had a severe hypo you are at increased risk of having another, but this risk can be reduced.

This document explains:

- What we did, and what we will do now
- What a hypo is
- What causes a hypo
- How to avoid more hypos
- Driving and hypos

What we did

You were conscious and able to swallow but unable to treat yourself so you were treated with one or more of these fast acting carbohydrates.

- *100ml - 120ml of Lucozade™*
- *150ml - 200ml of non-diet fizzy drink*
- *150ml - 200ml of concentrated orange juice*
- *4 - 5 GlucoTabs®*
- *5 - 6 Dextrose® tablets*

You were conscious but couldn't treat yourself. You were able to swallow so you were treated with:

- *2 x 25g tubes of GlucoGel®*

You were unconscious and treated with

- *1mg Glucagon® intra-muscularly*
- *Intravenous glucose (over 10 - 15 minutes)*

Now you are feeling better and are able to eat and drink, you should have some longer acting carbohydrate to eat, such as 2 digestive biscuits (*plain or chocolate*), or 2 - 4 rich tea biscuits, or a medium sized banana.

What we will do now

We will automatically contact either your practice diabetes team or your local community diabetes team to let them know that you have had a severe hypo so that they can contact you, to offer you help to prevent further episodes.

If you regularly attend a specialist diabetes clinic at the hospital, we will contact your usual diabetes team there, who may then contact you.

If you do not want us to do this, then please call this number 0845 6027310 in the next 3 working days to inform us not to contact your team.

The ambulance service is working with local health care teams through the Eastern Academic Health Science Network; www.eahsn.org.uk to help people who have had a severe hypo, avoid having a further episode.

If you are not happy for us to let your team know about your hypo, we would still strongly suggest that you make contact with them yourself, for further medical advice to prevent further episodes.

What is a hypo?

A hypo is when the blood sugar (*glucose*) level falls too low, and this usually only happens in people with diabetes who are using insulin or certain diabetes tablets. Any blood glucose less than 4.0mmol/L should be treated.

A hypo can be unpleasant and can occur very quickly. The brain depends on glucose, and if the glucose falls too low you can become confused or even unconscious, especially if the early signs are ignored/not felt and the hypo remains untreated.

A hypo can cause many symptoms, and people differ in what they feel, but early symptoms may include:

- Tingling in mouth, tongue, or fingers
- Blurred or double vision
- Increased sweating
- Increased anxiety
- Heart beating fast
- Feeling agitated or behaving oddly
(*often recognised by other people*)
- Sudden poor concentration
- Slurred speech

Remember, even a severe hypo may not cause symptoms, but it is still a hypo. This is called ***hypoglycaemic unawareness***. Loss of awareness is more common when people have had diabetes for a long time. It can also occur in people who are having frequent hypos, as a hypo makes it more likely you won't be aware of the next one. Awareness can sometimes improve, or return, if you avoid more hypos. Your diabetes team can help you with this.

What causes hypos and how to treat them

A hypo can happen in people with diabetes who are taking insulin, or who are on certain tablets for diabetes. These tablets are called sulphonylureas, and the commonest ones used locally are gliclazide and glipizide. Other tablets and injection treatments for diabetes rarely cause hypos by themselves. It is best to speak to your diabetes team if you have any concerns about your medication.

A hypo is more likely to occur in the following situations:

- Recent changes in your insulin dose, or type of insulin, or number of injections you have
- Recent changes in your diabetes tablets (*usually to a higher dose*) or other diabetes treatments
- Changes in where you inject your insulin (*injection sites*)
- Missed (or delayed) meals or snacks
- Changes in the sort of meal or snack you are having *i.e. less carbohydrate*
- Changes in activity – more exercise, or unexpected exercise
- Changes in routine – weekends, holidays, parties etc
- Increased alcohol intake, or binge drinking
- Becoming more sensitive to your normal treatments (*due to weight loss for instance*)
- Changes in weather (*more common in hot weather*)
- Many people say they are more prone to hypos when stressed
- Problems with the way you are injecting insulin
- Other medical problems; this is rare, but some conditions like thyroid or kidney problems can increase your risk of hypos, and some tablet treatments for other conditions can make diabetes tablets more effective in lowering blood glucose

Is this what caused your hypo? You should discuss this with your normal diabetes team.

How to prevent a further hypo

- Can you think of a reason(s) why this hypo might have occurred, looking at the list of possible causes on the previous page? If so, you can reduce the risk of more hypos by managing the situation and monitoring your glucose more carefully at these times.
- Contact with your local diabetes team – we will let them know you have had a hypo (*unless you tell us not to*). They should be able to help you reduce the risk of further episodes.
- Do you think the hypo might have been related to exercise, or to changes in alcohol intake? You can get more information on this from:

www.diabetes.org.uk/guide-to-diabetes/Managing-your-diabetes/Exercise/

www.diabetes.org.uk/alcohol

www.runsweet.com

<http://www.diabetes.org.uk/Guide-to-diabetes/Complications/Hypos-Hypers/>

- Do you think you have lost some of the symptoms that normally warn you about a hypo? If you don't experience symptoms during hypoglycaemia, or only start to feel them when your blood glucose is below 3.0mmol/L you could be experiencing hypoglycaemia unawareness. You should discuss this with your diabetes team.
- Do your friends, colleagues and close family know about recognising hypos? It is sensible to let them know what a hypo is, what your normal symptoms are, and how to treat it.

- Do you always carry a source of rapid acting carbohydrate e.g. GlucoTabs® or Dextrose® tablets, Jelly Babies or a sugary drink with you when you are working, driving or away from home?
- Do you test your blood glucose enough, or at the right time?
- If you get early symptoms of a hypo, or someone tells you they think you are hypo, check your blood glucose level and if it is below 4.0mmol/L you must treat it immediately. The first best treatment for a hypo would be
 - 100ml - 120ml of Lucozade™
 - 150ml - 200ml of non-diet fizzy drink
 - 150ml - 200ml of concentrated orange juice
 - 4 - 5 GlucoTabs® or 5 - 6 Dextrose® tablets
 - 4 Jelly Babies
- If you have a hypo, and treat it with some rapid acting carbohydrate as above, test your blood glucose 10 - 15 minutes later, and if it is still below 4.0mmol/L, you should repeat the rapid acting carbohydrate.
- Don't forget you should also follow this treatment with a longer acting carbohydrate such as a banana, cereal bar or sandwich to prevent hypoglycaemia recurring several hours later.

Driving and hypos

- You can get the information you need about driving and hypos from your diabetes team or from the DVLA www.gov.uk/diabetes-driving and there is useful information available from Diabetes UK www.diabetes.org.uk or from the Diabetes UK careline 0845 1202960.
- You should always carry glucose in the car such as a small carton of concentrated orange juice, GlucoTabs® or Dextrose® tablets, or Jelly Babies, and also have some longer acting carbohydrate (*such as a cereal bar*) in the car.
- You should check your blood glucose before driving and you should not drive if it is less than 5.0mmol/L. You should have a small snack, retest, and if above 5.0mmol/L then drive. This applies to short journeys as well as long journeys.
- By law, you should report to the DVLA if you have more than one episode of severe disabling hypo (*needing help from another person*) in a 12 month period. This may put your licence at risk; however it is your responsibility to do this. This applies to any severe hypo whether you are driving or not driving, and at any time of the day or night. We strongly recommend that you make contact with your diabetes team once you have had one severe hypo to put a plan in place to reduce the risk of further severe hypos from occurring and putting your driver's licence at risk.
- There are also separate rules for professional drivers www.gov.uk/diabetes-driving
- If you have lost hypoglycaemia awareness, and are driving, you should talk to your diabetes team as you may need more specialist advice.