



East Midlands Ambulance Service **NHS**
NHS Trust

'HYPOS' *can strike twice*

**A GUIDE FOR PEOPLE WITH
DIABETES WHO HAVE HAD
A HYPOGLYCAEMIC (low
blood glucose) EVENT**

- *Section 1; The ambulance call out*
- *Section 2; Low blood glucose levels and how to manage them*
- *Section 3; Driving*

Section 1: The ambulance call out (to be completed by the ambulance service)

East Midlands Ambulance Service (EMAS) responded to a 999 call to treat you for a 'hypo'

Name:		DOB:		
Date & Time of EMAS arrival:				
Time of EMAS departure:				
	How you were when we arrived	EMAS intervention	How you were when we left	
Time of reading (hh/mm)				
Breathing rate				
Blood glucose (mmol/l)				
Oxygen saturations				
Heart rate				
Blood pressure (mm/Hg)				
Temp (°C)				
ECG rhythm (12 lead)				
Pain score	/10			/10
Conscious level (please circle)	A ALERT V VERBAL P PAIN U UNRESPONSIVE			<input type="checkbox"/> ALERT



You have had a 'hypo' and were treated with fast acting carbohydrate:

You were conscious and able to swallow but unable to treat yourself so you were treated with fast acting carbohydrates: (EMAS please ✓)

- 100 ml - 120 ml of Lucozade™
- 150 ml - 200 ml of full sugar (not-diet) fizzy drink
- 150 ml - 200 ml (a small carton) of fruit juice
- 4 - 5 GlucoTabs®
- 5 - 6 Dextrose® tablets

Other:

You were conscious but unable to treat yourself, but still able to swallow so you were treated with: (EMAS please ✓)

- 1.5 - 2 tubes of GlucoGel®

You were unconscious and treated with: (EMAS please ✓)

- 1mg Glucagon® intra-muscularly
- 75-80 ml of intravenous glucose (over 10-15 minutes)

You will automatically be referred to your local specialist diabetes team/ GP Practice for specialist support. They will contact you within 2 working days and they may ask for the information EMAS completed contained within this leaflet

Your diabetes medication

Please tell us your current diabetes medication. This may help us to understand why you have had a 'hypo'.

EMAS PLEASE COMPLETE

The following people may need to be assessed in hospital:

Those who:

- Are older and who live alone
- Take Sulphonylureas e.g. *Gliclazide*, *Glipizide*, *Glibenclamide*
- Have no history of previous diabetes and have suffered their first hypoglycaemic episode
- Fail to respond to treatment
- Have been treated with *Glucagon*[®]
- Have additional complications such as renal dialysis, chest pain, cardiac arrhythmias, alcohol consumption, dyspnoea, seizures or focal neurological sign/ symptoms
- Have signs of infection (UTI, upper respiratory tract infections) and/or are unwell (flu-like symptoms)

If you are classed as one of the above but have strongly declined to be assessed in hospital you have been referred to:

EMAS TO COMPLETE

**EMAS MUST IDENTIFY
CONTINUING CARE**



Section 2: Low blood glucose levels (hypoglycaemia) and how to manage them

Now that you have recovered - for the next 24 hours you are at very high risk of another low blood glucose level therefore we recommend

- If you are not due to eat a meal, eat some starchy food like a sandwich or a banana
- You should eat regularly over the next 24 hours including starchy food e.g. rice, bread or potato
- You may need to reduce your insulin dose or your diabetes medication - you must do this in discussion with your GP, Diabetes Health Professional or, at any other time, through the Out of Hours GP
- If you have a meter test your blood glucose every 4 hours during waking hours
- Do not drive or operate machinery for at least 12 hours
- You should contact your healthcare professional or DVLA to check it is safe for you to drive
- Avoid strenuous activity for 24 hours
- Avoid alcohol for 24 hours

Low blood glucose levels and their management

What is a 'hypo'?

Glucose is a sugar carried in the bloodstream which your body uses for energy. If you have diabetes, your blood glucose levels can go up and down. When your blood glucose goes below 4 mmol/l, this is called hypoglycaemia (or a hypo)

Symptoms

Early signs and symptoms of a 'hypo' include:

- Sweating heavily
- Feeling anxious
- Trembling and shaking
- Tingling of the lips
- Hunger
- Going pale
- Palpitations



Symptoms can vary from person to person, but you will feel "unwell" very quickly. If you miss these early signs, the symptoms may get worse and lead to:

- Slurring of your words
- Behaving oddly
- Being unusually aggressive or tearful
- Having difficulty in concentrating

You should always treat a low blood glucose. If you do not treat your 'hypo' you may become unconscious.

Some people may not get any warning signs

Who has 'hypos'?

- If you are injecting insulin or taking diabetes tablets that make your body produce more insulin, then you may be at risk of 'hypos'
- If you are not sure how your diabetes tablets work, discuss this with your local pharmacist or your Diabetes Health Professional when they contact you.

What causes 'hypos'?

A number of situations can cause a 'hypo':

- **Too much insulin or too high a dose of diabetes tablets**
- **Drinking too much alcohol or drinking alcohol without eating**
- **Unplanned or strenuous activity**
- **Eating less starchy foods than usual**
- **Delayed or missed meals or fasting**

Treatment for hypos low blood glucose levels

Sometimes there is no obvious cause, but treatment should always be carried out immediately with food or drink which will raise your blood glucose quickly, as per the following advice:

Suitable **initial** treatments for 'hypos' are:

- **100 ml - 120 ml of Lucozade™**
- **150 ml - 200 ml of full sugar (not-diet) fizzy drink**
- **150 ml - 200 ml (a small carton) of fruit juice**
- **4 - 5 GlucoTabs®**
- **5 - 6 Dextrose® tablets**

IMPORTANT!

- **If you do not feel better or your blood glucose level is still less than 4 mmol/l after 5 - 10 minutes, repeat ONE of these treatments.**
- **If you are no better after 3 treatments seek advice.**



IMPORTANT

- *Never ignore the warning signs of a 'hypo'*
- *Act immediately by eating or drinking something that will raise your blood glucose quickly*
- *Make sure other people know what to do when you are having a 'hypo'*



If you need help treating your 'hypo'

If you are not able to treat your 'hypo' yourself, but are still conscious and able to swallow, someone can give you glucose gel if you have this available.

They should slowly squeeze the gel from 1 sachet into the inside of your cheek and around your gums. They should gently rub the outside of your cheek as this will help absorption into your gums. If done correctly it can take up to 15 minutes to use the whole sachet.

If you become unconscious, you need **immediate** emergency treatment. Someone should dial **999** for an ambulance and you should be put on your side with your head tilted back.

If you are unconscious glucose treatments should NOT be put in your mouth.



How to avoid 'hypos'

- Eat regularly
- You may need to eat more carbohydrates before and after physical activity
- Keep to sensible alcohol limits and do not drink on an empty stomach
- Take your medication at the recommended dose and times
- If you are testing your blood glucose levels, and notice your readings are regularly dropping, discuss this with your diabetes team as you may need a change in medication or your insulin adjusted
- Always carry glucose and a starchy snack with you to treat 'hypos' quickly



Section 3: Driving and diabetes after an ambulance call out.

If you have called out the ambulance and hold any sort of special driving license you must inform the DVLA (e.g. taxi driver, heavy good vehicle). If you hold a license to drive a car you should check with your healthcare professional before you next drive to find out if you need to inform the DVLA.

Your Healthcare Professional will be able to help you to learn more about your own 'hypo' signs and symptoms and help you decide if it is safe to continue driving.



IMPORTANT

If you have a 'hypo' whilst driving, stop the car as soon as possible. Remove the keys to demonstrate you are not in charge of the vehicle and move into the passenger seat if it safe to do so. Treat the 'hypo' as advised in this booklet. You must not drive for at least 45 minutes after recovering

IMPORTANT

Always check your glucose within 2 hours of driving. Do not drive if your blood glucose is less than 5.0mmol/L (sometimes your Healthcare Professional may advise a higher level, eat and re-test)

IMPORTANT

Always carry glucose and starchy food, e.g. a cereal bar in the car



This document has been designed for people who have been diagnosed with diabetes and are recovering from a hypoglycaemic ('hypo') event.

If you need more information or further explanation your Diabetes Healthcare Professional will discuss on contact.

© East Midlands Ambulance Service (EMAS)

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