

# Network Rail

## Diabetes Management Guidance for Line Managers

November 2007

Department Owner	Safety and Compliance
Content Manager	Valmai Hughes , Occupational Health Specialist
Version	1.0
Date issued	November 2007
Reference	DG/2007

---

This document is the property of Network Rail. It shall not be reproduced in whole or part nor disclosed to a third party.

© Copyright 2007 Network Rail

Uncontrolled copy once printed from its electronic source.

Published & Issued by: Network Rail 40 Melton Street, London NW1 2EE



# Contents

<b>1.</b>	Introduction	2
<b>2.</b>	Network Rail Diabetic Management	4
<b>2.1.</b>	Pre employment and pre appointment health assessment	4
<b>2.2.</b>	Employee Responsibilities	5
<b>2.3.</b>	Line Managers Responsibilities	6
<b>2.3.1.</b>	Diet controlled diabetic and medication controlled diabetic	6
<b>2.3.2.</b>	Insulin Controlled	6
<b>2.4.</b>	Job Characteristics	7
<b>2.5.</b>	Reasonable adjustments	8
<b>3.</b>	Return to Work	8
<b>4.</b>	Management of Hypoglycaemia	9
<b>5.</b>	Summary	9
<b>6.</b>	References	10

# 1. Introduction

Diabetes is becoming more common every year, its prevalence increasing within the younger population and where more people are treated with insulin. Diabetes is an illness that is no different to any other chronic illnesses. Concerns about people with diabetes and their fitness for safety critical work are based on the knowledge that some of these individuals due to their treatment, in particular insulin have a greater than average likelihood of impairment of awareness or concentration, sudden incapacity or loss of consciousness. Although such impairments may be due to gradually developing disorders such as visual impairment or Ischemic heart disease these are normally detectable in the context of a medical examination. Hypoglycaemia (reference 4) is of particular concern as it may occur at work and is difficult to assess or predict and may affect otherwise healthy , well controlled individuals with diabetes.

Diabetes mellitus is a condition in which the amount of glucose (sugar) in the blood is too high because the body cannot use it properly. Glucose is produced in the liver, but also comes from the digestion of starchy foods such as bread, rice, potatoes, chapattis, yams and plantain, from sugar, drinks such as lucozade and other sweet foods.

Insulin is vital for life. It is a hormone produced by the pancreas, which helps the glucose to enter the cells where it is used as fuel by the body. The main symptoms of untreated diabetes are: increased thirst; going to the toilet all the time – especially at night; extreme tiredness; weight loss; genital itching or regular episodes of thrush; and blurred vision.

There are two main types of diabetes:

Type 1: develops if the body is unable to produce any insulin. This type of diabetes usually appears before the age of 40 and appears in 0.3% of the population. It is treated by insulin injections and diet. Regular exercise is recommended.

Type 2: develops when the body can still make some insulin, but not enough, or when the insulin that is produced does not work properly (known as insulin resistance). In most cases this is linked with being overweight. This type of diabetes affects 3% of the population, usually appears in people over the age of 40, people of South Asian and African-Caribbean descent. However, recently, more children are being diagnosed with the condition, some as young as seven. This type of diabetes is treated with diet and oral medication. Sometimes insulin is added to improve the control of diabetes.

The main aim of treatment of both types of diabetes is to achieve as near to normal blood glucose levels and prevent associated problems such as high blood pressure, angina and raised cholesterol levels. This, together with a healthy lifestyle, will help to improve wellbeing and protect against long-term damage to the eyes, kidneys, nerves, heart and major arteries.

## **2. Network Rail Diabetic Management**

Employees of Network Rail working on or near the line or undertaking a safety critical role are subject to an initial health assessment and follow up periodic medicals at recommended intervals. The health assessment is to evaluate an employee's health in relation to Railway Group & Network Rail Company Standards.

Medical conditions such as diabetes, dependant on the treatment, may prohibit the employee from holding an unrestricted PTS or Signaller competence card. Determining employee fitness to work and associated restrictions will depend on the exact requirements of the post, the type and severity of their diabetes and treatment control. The restriction normally specifies that the employee must not act as a Lookout or IWA or work unaccompanied whilst on or near the line or while undertaking a safety critical role.

Following an initial medical assessment, a certificate (RT1018/1) will be issued with any restrictions and/or requirements for further medical review identified. For Signallers and Crossing keepers the line manager will need to keep a note of the medical restriction on their personnel file and amend their Signallers competence Card.

### **2.1 Pre- employment and pre appointment health assessment**

All applicants who propose to work on or near the line or undertaking a safety critical role will be subject to a face to face pre employment medical assessment. Prior to the medical assessment the line manager will need to compile a list of tasks and duties to be undertaken by the applicant.

A decision on fitness to work will be made by the Occupational Health Physician (OHP). This is based on clinical findings and any medical reports from Diabetic Specialist/ General Practitioner. A report will be provided by the OHP.

The majority of people with diabetes will be covered by the Disability Discrimination Act (DDA). This requires an employer not to discriminate on the grounds that an individual has diabetes. There is a requirement for employers to make 'reasonable adjustments' to accommodate an individual with diabetes.

This means that at pre employment stage, consideration must be given to how a post can be adjusted to accommodate the needs of the individual so that they can perform the core duties of the post.

Situations may arise where as a manager you believe you cannot meet your duties under health and safety law if you employ a person with diabetes in a particular job. However, if as an employer you refuse to employ a person with diabetes and reasons are ill founded, this may lead to Network Rail being taken to tribunal under the DDA and found liable. Where health and safety is put forward as the reason for refusal to employ an individual, be sure that the reason can be shown to be objectively justifiable.

On employment the employee should be advised by the line manager that if their condition or treatment regime changes at any time, that they must notify the line manager who must inform Network Rail Human Resource (HR) to arrange for an immediate medical review by our Occupational Health Service provider through a management referral.

## 2.2 Employee Responsibilities

All employees who have been identified with a chronic medical condition such as diabetes, where it may impact on their fitness to work in a safety critical role and /or on or near the line, will be medically assessed and reviewed by our Occupational Health Service provider.

Prior to the employee medical review, the employee will require making an appointment with their GP or Practice Nurse for an up to date assessment. The employee will be required to provide written confirmation to the Occupational Health Service provider. Questions may include the following:

### **In the past twelve months have you:**

- Attended a diabetes clinic at your GP surgery or at a hospital?
- Had a full eye examination to check for diabetic complications at the back of the eye?
- Had difficulty keeping your diabetes under control?
- Suffered from hypoglycaemic attacks (hypos), blackouts or impaired concentration?
- Been admitted to hospital because of your diabetes or medical conditions related to it?
- Taken time off work because of your diabetes or medical conditions related to it?

The employee should be advised by the line manager that if their condition or treatment regime changes at any time or that they are newly diagnosed with diabetes, they must notify the line manager who must inform Network Rail HR to arrange for an immediate medical review by our Occupational Health Service provider.

General controls that an employee should consider in taking responsibility over their medical condition are:

- Being knowledgeable over their condition and its treatment and educating their manager and colleagues of his medical condition and how an emergency should be handled
- Maintaining a healthy diet and weight by adopting sensible eating habits, establishing a routine that includes regular meals and snacks and carrying carbohydrate food in case hypos are threatened or meal breaks are delayed.
- Increasing physical activity, essential not only to control weight and diabetes, but to reduce the risk of heart disease, high blood pressure and a stroke.
- Maintaining frequent blood sugar monitoring - at least every 4 hours/pre meals and prior to commencement of shift and maintain normal levels. Also, keeping blood glucose high enough to avoid hypos during critical work periods.
- Being able to react appropriately to changes in their blood glucose and be aware of the early warning signs

- Maintaining regular review of their diabetes with their diabetic specialist and having compulsory review with the Occupational Health Physician at least annually.

## **2.3 Line manager Responsibilities**

### **2.3.1 Diet controlled diabetic and medication controlled diabetic**

All newly diagnosed diet and medication controlled diabetics will require to be referred initially via a management referral and all subsequent reviews with the review form. Prior to a medical review, the line manager will need to compile a list of tasks and duties undertaken by the employee. The list must be forwarded to our Occupational Health Service provider.

A decision on fitness to work will be made by the Occupational Health Physician. This is based on clinical findings and any medical reports from Diabetic Specialist/ General Practitioner. A report will be provided by the OHP.

On receipt of the report, the line manager needs to review the recommended restrictions given by the Occupational Health Physician and undertake a risk assessment which includes consideration of any restrictions and job characteristics, so enabling a safe system of work is established for the employee.

In most cases of:

- **Diet Alone**  
If there are no significant and disabling complications noted post medical assessment, there are no occupational restrictions.
- **Oral Medication and diet**  
Restrictions may apply dependant on the type of medication, the individual case and on occupational hazards, for example; working on or near the track (consideration to be taken to working near 3<sup>rd</sup> rail), working with unguarded machinery, and working with high voltage or open circuit electricity, working near open water, working on or near moving vehicles and working at unprotected heights.

### **2.3.2 Insulin controlled**

- **Newly diagnosed insulin dependant diabetic**

If an employee develops diabetes whilst in post, considerations of how they can be enabled to perform the duties of their post safely must be addressed. All newly diagnosed insulin dependant diabetics will require to be referred through a management referral to the Occupational Health Physician.

A decision on fitness to work will be made by the Occupational Health Physician, based on clinical findings and medical reports from the Diabetic Specialist/ General Practitioner and on the exact requirements of the post.

Given that there will be limited information as to the stability of the condition, PTS and any safety critical certification will be temporarily withdrawn and an appropriate safe system of work established. PTS or safety critical certification will only be issued with restrictions when diabetes management is well established and blood sugar levels are shown to have stabilised.

- **Existing Insulin dependant diabetics**

As an individual's medical condition and treatment can vary with time, this will need to be regularly re assessed by the Occupational Health Physician. All medical assessments for existing insulin controlled diabetics will be undertaken by our Occupational Health Service provider.

Prior to the medical review, the line manager will need to compile a list of tasks and duties undertaken by the employee. This must be forwarded to our Occupational Health Service provider.

A decision on fitness to work will be made by the Occupational Health Physician, based on clinical findings and medical reports from the Diabetic Specialist/ General Practitioner. A review of the risk assessment by the line manager will then be necessary to determine whether the existing controls are appropriate and to ensure that a safe system of work for the employee has been established.

If there is deterioration in the medical condition, and where a safe system of work cannot be identified within the employee's current role, then PTS or safety critical certification will be temporarily withdrawn and consideration will be given to redeployment.

## **2.4 Job Characteristics**

The primary concern for an individual with diabetes is the development of impairment of awareness or concentration while performing their duties thereby placing themselves or others at risk. In the worst case the impairment could be due to sudden loss of consciousness. When undertaking a risk assessment, careful consideration of job characteristics will help to identify situations where such impairment could be dangerous, for example

- Operation of equipment requiring constant vigilance
- Safety critical decision making
- Lookout duties
- Working alone
- Working on or near lines where trains have not been stopped ('red zone')
- Responsibility for the safety of others
- Irregular meal breaks or access to eating facilities
- Inability to modify duties or introduce adjustments
- Inability to hand over to others when impending hypoglycaemia or need for treatment /food
- Driving duties associated with job
- Large fluctuations in the level of physical exertion.

In these cases, additional controls require to be put in place to mitigate the risk, where operationally feasible. The Health Assessment Tool (reference Health Risk Assessment Guide) has been designed to assist line managers in enabling that a safe system of work still exists in light of any change to an employee's declared health status, where medical restrictions have been placed post an Occupational Health Physician consultation.

## **2.5 Reasonable adjustments**

Each person's experience of diabetes will be different; the effect of their health on work and work on their health will be different. It is important that for these reasons an employer should not assume that diabetes will mean an increased health and safety risk. Each job should be risk assessed to determine whether there are in fact any significant health and safety risks. The employee's medical condition should then be considered in relation to the overall risk assessment to determine whether there are, in fact, any increased risks either to themselves or their colleagues.

In all cases there requires to be an increased understanding of diabetes by the employee and those in the workplace. Consideration should be given to:

- Awareness briefing – to manager and close colleagues with the agreement of the individual and where the employee's privacy and confidential health matter is preserved and respected.
- Regular work schedules, breaks and meal breaks- a predicable routine will be vital to those who need to monitor their glucose levels, take insulin or eat
- Somewhere to store insulin (a fridge, insulated cool bag)
- Private space for testing blood glucose levels and or injecting insulin if required
- Allowing reasonable time off to attend medical appointments, rehabilitation or assessments
- Allowing an individual to gradually build up the level of fitness required
- Reallocation of duties
- Relocation to alternative position/ employment/ premises
- Establish procedures for dealing with a hypoglycaemic attack, in conjunction with the individual.
- Where there is diabetes related visual impairment, appropriate lighting, large print, use of adaptive equipment or performing tasks in a different manner. For specific competencies an unrestricted medical certification is required and therefore reasonable adjustment will not be suitable.
- Shift work- There is a common misconception that a person with diabetes is unable to work shift and in particular night work. Although shift work/ night work may create difficulties for some people with diabetes, an individual whose diabetes is well controlled may experience no difficulties at all. Again, it is important to assess each case on its own merit and not to make assumptions and to work with the individual to overcome difficulties.



### 3. Return to work

Where an employee has been absent from work due to illness associated with their diabetes and who undertakes a safety critical role or working on or near the line they will require to be medically reviewed before they return to full duties.

An employee is likely to be able to return to work within a short period of diagnosis being made.

In some cases their treatment can be stabilised while they remain at work. However anyone in a safety critical role or working on or near the line should be temporarily redeployed until seen by the Occupational Health Physician and their fitness to work determined and a safe system of work adopted by the line manager.

### 4. Management of Hypoglycaemia

It is important that treatment of diabetes is well controlled so as to minimise the risk of hypoglycaemia, this being a condition where the level of glucose (sugar) in the blood drops below a certain point, usually about 3.0mmol/l.

Hypoglycaemic episodes (hypos) can be caused by:

- **Over-treatment**- the dose of insulin or diabetes tablets is set too high or you accidentally take too much.
- **Mis-matched calorie intake versus demand** - this happens when your body needs energy but can't get it from your calorie intake i. e if you eat less than usual or exercise more.
- **Alcohol** - alcoholic drinks tend to lower the blood sugar.

This causes a number of symptoms such as dizziness, sweating, difficulty concentrating, and fatigue that usually go away 10 to 15 minutes after drinking or eating about 10-20g sugar, e. g in the form of sweetened juice, milk or glucose tablets.

Most people do get some warning that hypoglycaemia is happening. But for some, hypoglycaemia may cause few or none of the milder symptoms before the start of sudden unconsciousness or convulsions - particularly if they have had diabetes for many years. This means loss of consciousness can occur without warning.

Hypoglycaemia can occur in Type 1 diabetics who are insulin dependant, as well as in Type 2 that are controlled on some tablets and also for those who are treated both by tablets and insulin.

### 5 Summary

Where there is concern that an employee with diabetes may have increased risk of injury or harm to themselves or to others because of their condition and its treatment, a medical review with the OHP and an individual assessment using the Health Assessment Tool will be required. Any change in health status should be declared by the employee to their line manager and arrangements made for a medical re assessment.

## References

Diabetes UK, <http://www.diabetes.org.uk>

Diabetes Control and Complications Trial Research Group (DCCT). The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. New England Journal of Medicine 1993; **329**:977-86.

[http://content.nejm.org/cgi/content/abstract/329/14/977?ijkey=da62b92445161d3e720507da5f8ccc1abdbea4f5&keytype=tf\\_ipsecsha](http://content.nejm.org/cgi/content/abstract/329/14/977?ijkey=da62b92445161d3e720507da5f8ccc1abdbea4f5&keytype=tf_ipsecsha)

Disability Discrimination Act 1995 (c. 50)

<http://www.opsi.gov.uk/acts/acts1995/1995050.htm>

Good Practice Guide on Railway Workers and Diabetes – Guidance for Medical Assessors (RS/506 Issue 1). [www.rssb.co.uk](http://www.rssb.co.uk)

Rail Safety and Standards Board. Railway Group Standards

<http://www.rgsonline.co.uk/>

UK Prospective Diabetes Study Group (UKPDS). Intensive blood glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33). Lancet 1998; **352**:837-53.

Welsh case challenges stereotyping of people with diabetes. The Disability Rights Commission Tuesday, November 18, 2003

<http://www.drc->

[gb.org/about\\_us/drc\\_wales/newsroom/welsh\\_case\\_challenges\\_stereoty.asp](http://www.drc-)