Injury and Fall Prevention for People with Learning Disabilities

A Resource Guide for People who Care for or Support People with Learning Disabilities

March 2016

Overview

Injuries and falls are a serious problem for people with learning disabilities. People with learning disabilities are twice as likely to experience an injury, compared to the general population, and between 6 and 8 times more likely to die as a result of their injury. Falls are the commonest cause of injury for people with learning disabilities.

The aim of this resource guide is to raise awareness of the causes and types of injuries and falls experienced by people with learning disabilities, amongst those who care for or support them, and to provide practical information and resources to help prevent injuries and falls.

Self-assessment exercises are included, in case you want to test your awareness as you read through.

We do hope you find this resource guide informative and useful.

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Health Needs

People with learning disabilities experience many health problems much more commonly than the general population, either in general or within specific conditions[1]. People with learning disabilities are more likely to experience impacted cerumen (ear wax) for example; people with Down's syndrome more so because they have narrower ear canals.

If you care for or support someone with learning disabilities, it is important that you are aware of the health problems that are experienced more commonly, particularly if you care for or support someone who has a known learning disabilities condition, such as Down's syndrome or Fragile X syndrome. You can learn more about the particular health needs of the person you care for or support by visiting trusted websites (we have included a list of examples for you in the Resources section).

Health Checks

Annual health checks are recommended for people with learning disabilities, to ensure their individual health needs are being identified and met. If the person with learning disabilities you care for or support is not already receiving an annual health check from a health professional, then you can discuss this with the person's GP (general practitioner - family doctor) or a health care professional already involved in their care/support e.g. community learning disabilities nurse.

Reasonable Adjustments

People with learning disabilities use the same health care services as everyone else, as much as they are able to, with specialist input from community

learning disabilities teams as necessary. People with learning disabilities however, can experience barriers to accessing appropriate health care and treatment. For example, lack of accessible information in easy language/pictures/symbols format for people with communication difficulties, and lack of access for wheelchair users.

In the UK, the **Equality Act 2010** is addressing these barriers, as it is now a statutory requirement that all health care providers make **reasonable adjustments**, to ensure people with disabilities have equal access to their services, same as everyone else.

If you are supporting someone with learning disabilities to access appropriate health care e.g. going into hospital for an operation, then it may be worth notifying them beforehand that the person has learning disabilities, and asking if they have a **learning disabilities champion** or anything else (e.g. a reasonable adjustments policy) available to assist you. A **health passport** for the person with learning disabilities you care for/support is recommended.

Raising Awareness

Lack of awareness of the particular health needs of people with learning disabilities is one of the main barriers to accessing appropriate health care and treatment; particularly if the person has severe or profound learning disabilities and difficulty in communicating discomfort or pain.

The aim of this freely available resource guide is to raise awareness of the problem of injuries and falls in particular, amongst those who care for or support people with learning disabilities. We do hope you find this resource guide useful enough to recommend it to others, to help raise awareness more widely, and further promote injury and fall prevention for people with learning disabilities.

Resources: Health Information

In the UK, there are two **Learning Disabilities Observatories**:

- The Improving Health and Lives Learning Disabilities Observatory in England and Wales at https://www.improvinghealthandlives.org.uk
- The Scottish Learning Disabilities Observatory at http://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/sldo/

A Learning Disabilities Observatory is responsible for monitoring and reporting on the health needs and health care received of people with learning disabilities. These trusted websites are worth visiting to learn about the health of people with learning disabilities because:

- They synthesise all of the current evidence on the particular health needs of people with learning disabilities, and produce regular summary reports in easy read format.
- They are a good place to access and share accessible resources, to help promote the health and wellbeing of people with learning disabilities. The Improving Health and Lives Observatory for example, have produced a freely available series of guides on, Making Reasonable Adjustments to Health Care Services for People with Learning Disabilities.

If you care for or support someone with a known learning disabilities condition, such as Down's syndrome, then there are a number of charitable organisations with trusted websites, to visit and learn about their particular health needs. A few examples are as follows:

- Down's Syndrome Association at http://www.downs-syndrome.org.uk/?gclid=CIXrlfPO4MoCFRATGwodjEwDDQ
- The Fragile X Society at http://www.fragilex.org.uk/
- The National Autistic Society at http://www.autism.org.uk/about/what-is/asd.aspx
- Prader-Willi Syndrome Association UK at https://www.pwsa.co.uk/information-support-advice/about-pws/

Injuries and Falls: Current Evidence

For the purpose of this resource guide, a **serious injury** can be defined as resulting in bone fracture, hospitalisation or death; in comparison to **minor injuries**, such as cuts or grazes, bruising or pinching part of the skin, or swelling or tenderness.

A **fall** is defined as 'an unexpected event in which the participants come to rest on the ground, floor or lower level'[2].

Injury Rates and Causes

- People with learning disabilities of all ages are **twice as likely to experience injury**, compared to the general population[3-6].
- People with learning disabilities are between **6 and 8 times more likely to die** as a result of their injury[3 & 7-9]; this means that the consequences of injury can be much more serious for people with learning disabilities.
- The main causes of fatal injuries of people with learning disabilities are **pedestrian accidents**, **falls**, **asphyxia** (choking), **burns**, **drug toxicity** and **drowning**[3 & 7-9].
- **Falls are the commonest cause** of (fatal and non-fatal) injury reported for people with learning disabilities[3 & 4]. Indeed, people with learning disabilities fall (with or without injury) at similar or higher rates than the elderly in the general population.
- Between 25% and 40% of people with learning disabilities experience at least one fall (with or without injury) in a 12-month period[3, 10 & 11]; and around one-third of falls reported for people with learning disabilities result in **fall injury**.
- People with learning disabilities are also significantly more likely to experience **burns or scalds**, and **injuries from other causes** which are not as commonly reported for the general population; such as walking or banging into furniture, carer's misuse of equipment (e.g. wheelchair or

hoist), drug administration errors, and injuries from unknown causes (because the person with learning disabilities has been unable to communicate how he or she sustained an injury) [4].

Types of Injury

- The most common types of injury reported for people with learning disabilities are cuts or grazes, bruising or pinching part of the skin, and swelling or tenderness.
- People with learning disabilities are significantly more likely to experience bone fractures and burns or scalds, compared to the general population.
- People with learning disabilities are a high-risk population for fractures[12 & 13].

Bone Health and Fractures

Bone health is important for health and wellbeing, and for preventing/reducing the risk of bone fractures. The main things you can do to promote/maintain the bone health of the person you care for/support are:

- Promote and provide increased opportunities for weight bearing exercise
- Include foods with calcium and vitamin D in the person's diet
- Discourage prolonged periods of sitting, smoking, and alcohol.

People with learning disabilities are more likely to experience bone fractures, compared to the general population, and they are a high risk population for developing osteoporosis[13]. Osteoporosis is characterised by low bone mineral density and increasingly brittle bones. Osteoporosis increases the risk of experiencing bone fracture/s.

Osteoporosis

People with learning disabilities who may at particular risk of developing osteoporosis are:

- People who are prescribed antiepileptic medication (which lowers bone density)
- People who are immobile (e.g. wheelchair users)
- People with Down's syndrome.

People with Down's syndrome are more likely to experience particular health conditions which lower bone density, such as hypothyroidism and early menopause for women with Down's syndrome.

If you are concerned that the person with learning disabilities you care for/support may be at risk of developing osteoporosis, then it is worth consulting their family doctor/GP.

The gold standard for diagnosing osteoporosis involves a DXA (Dual-Energy X-Ray Absorptiometry) scan of the person's hip and spine.

Some people with learning disabilities may find it difficult to tolerate a DXA scan – which requires the person to lie still on a soft table for around 10 - 15 minutes whilst a scanner passes over the body – but alternatives can be considered, such as the person sitting on a chair beside the table so their wrist and forearm can be scanned instead.

Vitamin D and calcium supplements are treatments for osteoporosis.

Self-Assessment Exercise 1

This is the first of 8 optional self-assessment exercises, included in this resource guide to help you test your awareness as you read through. The answers for all exercises are provided at the end (on page 61).

1. Health checks are recommended for people with learning disabilities…

A) Every 3 months [ ]

B) Every 6 months [ ]

C) Every 12 months [ ]

D) Every 2 years [ ]

2. Health care providers are required to make reasonable adjustments to their services by law

A) True [ ]

B) False [ ]

3. Lack of awareness of the particular health needs of people with learning disabilities is a barrier

A) True [ ]

B) False [ ]

4. People with learning disabilities are… times more likely to experience an injury, compared to the general population

A) Ten [ ]

B) Five [ ]

C) Two [ ]

5. People with learning disabilities are up to… times more likely to die as a result of injury, compared to the general population

A) Ten [ ]

B) Eight [ ]

C) Three [ ]

D) Two [ ]

6. The commonest CAUSE of injury reported for people with learning disabilities is…

A) Burns or scalds [ ]

B) Asphyxia (Choking) [ ]

C) A fall [ ]

D) Drowning [ ]

7. What percentage of falls reported for people with learning disabilities result in injury?

A) 25% [ ]

B) 33% [ ]

C) 50% [ ]

D) 75% [ ]

8. The most common TYPE of injury reported for people with learning disabilities is…

A) Bone fracture [ ]

B) A cut or a graze [ ]

Risk Factors for Injuries and Falls

Researchers and research-active clinicians conduct studies to identify risk factors for injuries and falls experienced by people with learning disabilities; this is because the identification of risk factors can inform the development of targeted interventions to prevent future injuries and falls amongst at-risk groups of individuals with learning disabilities.

Research on risk factors for injuries and falls however, is still limited, and more work needs to be done on identifying risk factors.

At the moment, the following have been identified as risk factors for injuries (from any cause) amongst people with learning disabilities[4 & 14]:

- Psychopathology (emotional and behavioural problems)
- An overly sociable temperament
- Epilepsy.

Risk factors which have been identified for fall injuries so far amongst people with learning disabilities are[4 & 11]:

- Epilepsy
- Urinary incontinence.

It is not yet known why the presence of urinary incontinence (nor what type of urinary incontinence) increases the risk of fall injury amongst people with learning disabilities.

Balance and gait problems have also been found to be associated with falls and fall injury amongst people with learning disabilities (Finlayson et al., 2010).

Risk Factors for Falls in Older People

The evidence on risk factors for falls amongst older people in the general population is much more substantial. The main risk factors identified for falls in the elderly are summarised below[15].

Demographic: • Race (being Caucasian) • Low socio-economic status
Biological: • Older age • Sex (being female)
Medical conditions: • Diabetes • Parkinson's disease • Depression • Incontinence (mixed) • Alzheimer's disease
Physical: • Poor gait/balance • Muscle weakness • Visual impairment • Cognitive impairment • Foot problems • Low weight (low body mass index, BMI) • History of previous falls
Behavioural & Lifestyle: • Sedentary behaviour (not being physically active) • Medication intake (taking more than four prescribed drugs irrespective of type, or certain types of drugs e.g. antidepressants or antipsychotics) • Alcohol misuse • Inappropriate footwear • Person has a fear of falling
Environmental: • Stairs/steps • Poor lighting • Highly patterned carpets • Wires/flexes • Slippery floor.

People with learning disabilities share similar characteristics to the elderly in the general population; in that they too experience higher rates of many of the factors which have been identified as risk factors for falls in the elderly (e.g. poor gait/balance and visual impairment).

It is still important however, to identify risk factors which are more specific to people with learning disabilities, such as epilepsy. People with severe or profound learning disabilities for example, can be up to fifty times more likely to experience epilepsy, compared to the general population[16].

People with Learning Disabilities and Ageing

People with learning disabilities, like the general population, are living longer. As longevity increases for people with learning disabilities, it becomes increasingly important to consider ageing when promoting health and wellbeing. Some people with learning disabilities may become more prone to injuries and falls through ageing.

Falls are Multi-Factorial

It is also important to know that risk factors for falls are usually multi-factorial; the more risk factors a person has, the more vulnerable they are to falling[17].

If you care for or support someone with learning disabilities who has experienced at least one fall injury or frequent falls with or without injury (three or more falls), then it is important to consider all possible reasons why they may be falling (if you don't already know the reason/s), so you can address them.

Self-Assessment Exercise 2

Read the case study below and then answer the questions.

Jenny is a 45 year old woman with learning disabilities who lives in a supported living group home with three other tenants. Jenny has epilepsy and she has recently been attending her local health centre for blood pressure monitoring, due to hypotension.

A support worker who was on sleepover heard a loud bang at 6am, and went upstairs to find that Jenny had fallen in the bathroom. Jenny said that she did not know what had caused her to fall, but there was a puddle of water on the bathroom floor, which had been caused by another tenant coming out of the shower 30 minutes before.

The support worker asked Jenny why she was not wearing her glasses or her slippers. Jenny said she couldn't find either of them because the bulb in her table lamp wasn't working, and she had walked to the bathroom from her bedroom in the dark. Jenny was embarrassed that she had fallen. The support worker realised this and changed the subject to avoid causing her further embarrassment. They talked about the new rug Jenny had bought for the bathroom the day before.

1. Write down two **medical** factors which may have contributed to Jenny's fall.

2. Write down at least two **environmental** factors which may have contributed to Jenny's fall.

3. Jenny not wearing her glasses or her slippers may have contributed to her fall. What is the first thing the support worker must do as a priority to prevent this in the future?

Risk Assessment

If you care for or support someone with learning disabilities in a supported living or residential setting, then you will already be familiar with conducting risk assessments; both in terms of general risk assessments for the household or residence, and individualised risk assessments for the person you care for/support.

If you care for or support someone with learning disabilities at home as a family carer, then you may or may not be familiar with risk assessment. We hope that you find this section useful for considering your own risk assessments at home.

As mentioned in the previous section, the factors which increase a person's risk of injury or falling can be:

- Demographic
- Biological
- Medical
- Physical
- Behavioural and lifestyle
- Environmental.

Whilst not all factors are modifiable (e.g. older age), many factors are (e.g. encouraging the person to become more physically active to reduce sedentary behaviour, or ensuring the person is wearing proper fitting and appropriate footwear).

Individualised risk assessment is a very important part of effective care/support planning for people with learning disabilities. Individual risk assessment should be reviewed regularly at frequent intervals (e.g. every 3 to 6 months).

If you care for or support someone with learning disabilities who has experienced at least one fall injury or frequent falls (three or more falls), then it is very important that they have an individual risk assessment for falls in their care/support plan.

If you care for or support someone with learning disabilities who has experienced at least one injury from a different cause, then it is also very important that they have an individual risk assessment in their care/support plan for that particular cause of their injury (e.g. burns/scalds or choking).

How to Assess Risk

There are many different examples of individual and general risk assessments, which vary between different organisations providing care or support services to people with learning disabilities. The Health and Safety Executive's Five Steps to Risk Assessment (2011) provide an important guide or framework for what should be considered and included when assessing risk:

1. Identify the hazard/s.

2. Decide who might be harmed (at risk) and how.

3. Evaluate the risks and decide on precautions.

4. Record your significant findings.

5. Review your assessment and update if necessary.

Epilepsy Care/Support Planning and Management

If you care for or support someone with learning disabilities who has epilepsy, it is very important that they have an epilepsy care/support plan, and that their epilepsy is considered in relation to preventing injuries and falls.

Epilepsy has been identified as a main risk factor for both injury (from any cause) and falls (often but not exclusively seizure-related) in people with learning disabilities.

Epilepsy is a non-modifiable risk factor – in that the person may always have the condition – but effective epilepsy management is essential for reducing/preventing injuries and falls. Epilepsy management involves regular monitoring and documenting of seizure types and activity, and regular reviews of anti-epileptic medication, both for effectiveness of controlling seizures and monitoring side-effects. Anti-epileptic medication – whilst being important for controlling seizures – can increase the risk of injuries and falls due to side effects (e.g. affecting bone density and increasing risk of osteoporotic bone fracture). Epilepsy management requires input from a health professional involved in the person's care/support (e.g. doctor or epilepsy nurse specialist).

Positive Risk-Taking

Risk assessment in care/support planning for people with learning disabilities involves:

1. Managing risks in the everyday lives of people who cannot always recognise or appreciate the consequences or benefits of taking risks on their own.

2. Supporting people with learning disabilities to take informed risks in order to have increased choices and opportunities to self-determine and improve the quality of their lives[18].

The latter of the two in particular, refers to **positive risk-taking**.

Whilst it is essential that injury and fall risk assessment and prevention is incorporated into individual's care/support planning; at the same time, it is extremely important that people with learning disabilities are supported to lead as active and as inclusive lives as possible in their own communities.

Some activities can involve an element of risk (e.g. getting on and off a bus, or going up and down stairs or escalators); but as long as you are mindful of the higher risk of injury, and conduct risk assessments which are reviewed regularly, you can better support the person and counter the risk of injury.

Overcoming Fears

People with learning disabilities can also develop fears as a result of injury or falling. For example:

- Fear of going outside unsupported following a fall outdoors.
- Fear of crossing the road following a pedestrian accident.
- Fear of falling following a fall.

It is important to support individual's to overcome their fears following an injury/fall, to help rebuild their confidence.

Fear of falling has been identified as a risk factor for future falls in older people in the general population, so it is important to consider/check for this in individuals with learning disabilities who have experienced a fall. Determining whether the person has a fear of falling does not require complex assessment. Current research recommends asking the following easy to understand question[19]: *'Are you afraid of falling?' (Yes or No).*

Self-Assessment Exercise 3

Thinking about the person with learning disabilities you care for or support, please take a note of any factors which may increase their personal risk of falling.

The aim of this exercise is to help you think about a range of factors across all six domains (from demographic to environmental factors) when you are assessing risk.

It is worth completing the exercise as a practise, even if you do not think the person you care for/support is at risk of falling.

Or alternatively, you may wish to complete this exercise for the person being a risk of injury from another cause (e.g. burns or scalds, or choking).

1. Does the person have any demographic or biological factors which may increase their risk of falling (e.g. older age)? If yes, list them.

2. Does the person have any known (diagnosed) medical conditions (e.g. epilepsy or diabetes)? If yes, list them and underline any which may increase their risk of falling.

3. Does the person have any physical factors which may increase their risk of falling (e.g. visual impairment or poor gait/balance)? If yes, list them.

4. Does the person have any behavioural or lifestyle factors which may increase their risk of falling (e.g. polypharmacy or a mainly sedentary lifestyle)? If yes, list them.

5. Now have a look around the person's immediate home environment, and see if you can identify any environmental hazards which may increase their risk of falling. Please list any hazards you have found.

6. Of all the factors across all six domains you have identified and listed, which of them are potentially modifiable?

7. If you have identified factors which are potentially modifiable, list any health care professionals or other supports who are (or could be) involved in working with you and the person you care for/support to reduce this particular risk of falling.

8. When you were assessing risk of falling within the person's immediate home environment, did you come across any hazards which could be removed or addressed immediately (e.g. an obstacle or object on the floor)? If yes, then you will appreciate the benefit of assessing risk routinely, to promote health and safety on an everyday basis.

Reporting and Recording Injuries and Falls

Organisations who provide supported living and residential services to people with learning disabilities are required to have organisational procedures in place – including **injury incident reporting** and **recording** procedures – to ensure care standards[20], to support people with learning disabilities to live safe and healthy lives in their own communities[21]. The Health and Safety Executive, Care Inspectorate, and funders ensure organisations meet and maintain these standards.

Previous research on how care and support workers report and record injury incidents within and between organisations is limited. A previous review of thirteen different residential and vocational services for adults with learning disabilities in one geographical region of New Zealand found that, there were numerous inconsistences and discrepancies in report-writing and record-keeping amongst care/support workers within and between these services[22].

A more recent study of three supported living service providers in Scotland however, found that the high rate of particularly minor injuries (e.g. cuts and grazes) being reported for 163 (28%) of 593 adults with learning disabilities in a 12-month period, suggested a good work practice culture of injury reporting and recording within these supported living services[6]; in that the support workers were being careful to report/record even minor injuries. All three organisations used a similar electronic injury monitoring system, which is recommended for consistency of injury reporting and recording within and across services.

Report and Record 'Near Misses'

If you care for or support someone with learning disabilities within a supported living or residential service, it is very important that you report and record 'near misses' as well as actual injury incidents. This helps identify patterns of near injury, which warrant further investigation and/or intervention to prevent injury.

When you are reporting and recording injury incidents, it is important to document as much information as possible, including what happened immediately before and after the incident. This information may help identify hazards/factors which can be addressed, to prevent or reduce further injuries.

Falls Chart

If you care for or support someone who has experienced at least one fall injury or frequent falls (three or more falls) then it is important to keep a falls chart – a written record of their falls as they occur. A falls chart helps identify patterns (e.g. whether the person is falling during the day or night, or whether they are more likely to fall indoors or outdoors), as well as charting progress (fewer falls) once measures to reduce/prevent falls have been taken.

Falls Chart Example

Date	Time	Place	Lead up to fall	Reason for fall	Any specific injury?	Action taken	Name of person recording
10/02/2016	20.00	Near the kitchen door	Client did not sleep well last night	Left knee buckling	No injury	Client was able to get up from floor	Shauna Smith

Crockett et al (2015)[23].

Resources: Health and Safety Regulation

Information about Reporting Injuries, Diseases and Dangerous Occurrences (RIDDOR) regulations is available directly from the Health and Safety Executive website at http://www.hse.gov.uk/riddor/

Information about the Health and Safety Executive's Five Steps to Risk Assessment is available at http://www.hse.gov.uk/risk/controlling-risks.htm

The Care Inspectorate website is at http://www.careinspectorate.com/

Self-Assessment Exercise 4

Read then answer the questions regarding this injury incident description, which Jenny's support worker wrote (about the incident described earlier in self-assessment exercise 2 on page 18).

I was woken at 6am by the sound of a loud bang. I found Jenny lying on the bathroom floor. She had fallen. I assisted Jenny to get up from the floor and then I checked her for any sign of injury. She was fine.

1. Do you think Jenny's support worker provided an adequate and detailed account of the incident?

2. Do you think Jenny's support worker provided enough detail to identify potential hazards to prevent future falls?

3. Write your own account of Jenny's fall (based on the information available to you in self-assessment exercise 2 on page **). How does your account of the injury incident compare with that of Jenny's support worker? Have you done anything differently, or added more information?

4. If you care for or support someone with learning disabilities within a supported living or residential service, then you will have experience of completing injury incident reports.

Review the most recent injury incident report that you completed for a person with learning disabilities you care for/support.

Do you think you provided enough information about the incident in your report? Is there anything you could have done differently, or was there more information you could have added?

Injury Prevention

Whilst many of the steps we can take to prevent injuries are straightforward and may seem obvious (many of which you will already have taken); it is worth stating some of them in this section, to stress their importance.

First Aid (Choking)

If you care for or support someone with learning disabilities, then it is important that you have first aid training; and that any training you undergo involves first aid responses to choking episodes and injuries from burns or scalding. Choking episodes can be distressing for the person you care for/support and you. Choking episodes can also be fatal.

If you care for or support someone with learning disabilities who may be at risk of choking (e.g. having difficulty swallowing at meal times), then a speech and language therapist can complete an eating and drinking (swallowing) assessment, to determine if the person's food needs to be modified. A dietician can then adjust the person's food/meal plans to incorporate the guidance.

Water Temperature Control

If the person you care for/support's home or residence has temperature controlled hot water (many homes and residences do), then that is a big step in preventing burns/scalds through e.g. bathing.

If the person's home/residence does not have temperature controlled hot water, then you can look into having a valve fitted for this purpose, with e.g. the housing provider if the property is rented.

If there is no temperature controlled hot water in the home or residence, then at the very least, you should purchase and use a bath thermometer. A bath thermometer is a small but worthwhile investment for preventing burns/scalds.

People with learning disabilities can also sustain burns/scalds through the use of household electrical appliances (e.g. kettles and irons), and hot water spillage (e.g. hot cups of tea or coffee). These items should also be considered in risk assessment to prevent injury.

Safe Use of Equipment

If you care for or support someone with learning disabilities who requires specialist equipment – aids and adaptations – to assist them in their everyday lives, it is extremely important that the equipment is serviced regularly and well maintained; and that everyone using the equipment has been shown how to use it, and is competent in using it. Some hoists for example, require two people to use them. Previous research has reported on incidences of injury due to carers' misuse of equipment, such as a wheelchairs or hoists[4].

If you care for or support someone with learning disabilities within a supported living or residential service, use of specialist equipment must be included when orientating new or casual members of care/support staff to the individual's care/support needs. The use of hoists and slings should always have a completed risk assessment, to determine the number of operators required to keep the person safe during manoeuvre.

Full Attention

If you care for/support someone who requires a lot of support and assistance to complete their daily activities (such as eating or bathing), do not rush them,

support them to take their time, and give them your full attention until the activity (or task) is complete.

If you become distracted and say, leave the person alone in the bathroom so you can go and answer the telephone, then they can easily fall or become injured in the few minutes you have left them alone.

Case Study Example:

My first job when I left school was in a residential school for children and young people with learning disabilities.

One time I was in the bathroom changing a young boy's incontinence pad. The young boy was blind with brittle bones. He was lying on the changing mat, which was on a raised platform so I did not strain my back whilst moving, handling and changing him.

I remember turning away from the boy for a few seconds, to fetch a new incontinence pad from the pack behind me, and then hearing him shriek gleefully, 'Whee'. He was actually falling to the floor.

Luckily I managed to catch him inches from the floor, but I never forgot the important lesson it taught me; carefully plan each task and make sure you have everything you need to complete the task before you start. Once you are committed to the task there is no room for distraction.

The boy's bones were fragile with a high risk of fracture. What could have happened doesn't bear thinking about.

Having the pack of incontinence pads behind me was a mistake, because it meant turning away from the boy momentarily. Having a new incontinence pad within reach in front of or beside me would have been the correct thing to do.

Janet, Resource Guide Author

Resources: First Aid

The following trusted web sites feature current first aid advice and practical demonstrations via video links:

- British Red Cross at http://www.redcross.org.uk/What-we-do/First-aid
- St John Ambulance at https://www.sja.org.uk/sja/first-aid-advice.aspx

Self-Assessment Exercise 5

Please note: You will need to consult the previously mentioned web sites, or a first aid manual, before completing this exercise.

1. If a person is choking due to a mild blockage, and is able to follow easy instruction, then they can clear the blockage themselves by…

A. Sneezing [ ]

B. Holding or pinching their nose [ ]

C. Coughing [ ]

D. Screaming [ ]

2. The person is likely to have a mild blockage if they can still… (Please tick all FOUR correct answers)

A. Sleep [ ]

B. Speak [ ]

C. Cry [ ]

D. Blow their nose [ ]

E. Cough [ ]

F. Breathe [ ]

3. If the person requires your help to remove the blockage which is causing them to choke, you can try back blows and abdominal thrusts. Which of the two should you try first?

A. Back blows first [ ]

B. Abdominal thrusts first [ ]

4. When a person sustains a burn or scald, you should cool the burn/scald under cold running water for at least…

A. 3 minutes [ ]

B. 5 minutes [ ]

C. 10 minutes [ ]

D. 30 minutes [ ]

5. Cooling the burn/scald with cold running water is important for TWO reasons (one immediate, and one long-term). Please write two reasons why you think cooling is important.

6. From your own experience, can you think of any instances where you were assisting or supporting a person with learning disabilities and injury was narrowly avoided? If yes, what did you learn from this?

Fall Prevention and Exercise

Promoting physical activity, including exercise, is extremely important for improving and maintaining the health and wellbeing of people with learning disabilities. People with learning disabilities are known to experience higher rates of obesity, compared to the general population, and be less physically active.

Exercise doesn't cost anything – it's free.

Current evidence has demonstrated that balance and/or gait problems are one of the main reasons people with learning disabilities fall; and that tailored exercise interventions to improve balance and gait are a priority for developing effective fall prevention in this population.

Diagnostic Overshadowing

If a person with learning disabilities has problems with their balance or gait when walking, this can for some, be viewed as just being part of their learning disabilities. We call this **diagnostic overshadowing**; not treating the problem or condition because it is seen as being part of their learning disabilities.

For many people with learning disabilities however, problems with their balance or gait can be addressed through exercise.

Exercises to maintain or improve a person with learning disabilities balance or gait as they age, can also help prevent future falls; this means it can be effective in fall prevention (before falls and fall injuries become a problem for that person).

If you care for or support someone with learning disabilities who has problems with their balance or gait, then a physiotherapist can assess their balance and/or gait, and provide practical advice and assistance.

Physiotherapy-Led Falls Pathway Service

Researchers and research-active clinicians in Scotland evaluated a newly set up Falls Pathway Service within a Community Learning Disabilities Physiotherapy Team in Glasgow[23]. Fifty clients with learning disabilities were referred in an 18-month period, 35 (70%) were prescribed exercise and 27 (54%) completed the exercise programme. They found that completion of the exercise programme led to significant improvement in the clients' balance and mobility, and a decrease in the number of falls.

12-Week Exercise Programme

The Falls Pathway Service 12-week home-based exercise programme is illustrated for you on the next page.

The programme involves individuals with learning disabilities completing 2 – 3 warm up exercises, 2 – 3 general/strengthening exercises, and 2 – 3 balance exercises every day for 12 weeks; plus 2 – 3 aerobic exercises per week for 12 weeks.

The exercise programme is individualised, in that the physiotherapist selects exercises appropriate to the individual's needs, from a choice of exercises from each of the four domains (warm up, general/strengthening, balance, and aerobic). The physiotherapist will then provide a written exercise programme in photo format for the individual to complete. It is recommended that the individual and their carer (support worker or relative) complete the exercises together, to help motivate and support the person.

Incorporating these exercises into everyday life (beyond 12 weeks) is recommended.

Falls Exercises for Clients with Learning Disabilities	
Warm up exercises	• Chair march • Arm swings • Shoulder circles • Foot tap • Trunk twists • Chest stretch • Back of thigh stretch • Calf stretch • Head movements • Neck movements • Back extension
General/strengthening exercises	• Wrist strengthening • Hip exercises/with weights • Back stretch on bed • Forward bending on chair • Wall press ups • Seated leg raise/with weights • Knee bends/with weights • Shoulder movement with fixed elbows • Back stretches in chair • Neck exercises • Arm raise/with weights • Elbow bend/with weights • Side arm raise/with weights • Elbow strengthening exercise
Balance exercises	• Side steps • Heel raises with support • Toe raises with support • Marching with support • Leg swings • Knee bends with support • Turning around with support • Sideways walking • Heel toe standing with support • Sitting on a physiotherapy ball • One leg stand with support • Sit to stand two/one/no hands • Tai Chi • Wall squats • Dynamic trunk exercise
Aerobic exercises	• Walking • Static cycling • Stair climbing • Swimming • Marching

Crockett et al (2015)[23].

Resources: Exercise

The Falls Pathway Service at the Physiotherapy Community Learning Disabilities Team in Glasgow provides free information leaflets on the following:

- Education leaflet incorporating a Falls Chart
- Mobility and safe use of walking aids
- Don't fall: Tips for your safety
- Getting up from the floor following a fall
- Exercise plan for bone health (osteoporosis).

Contact the Falls Pathway Service via Jennifer Crockett at Jennifer.Crockett@ggc.scot.nhs.uk

Paths for All is a partnership of organisations committed to promoting walking for health and the development of multi-use path networks in Scotland at

http://www.pathsforall.org.uk/pfa-home

Current UK physical activity guidelines can be accessed directly from the UK Government web site at

https://www.gov.uk/government/publications/uk-physical-activity-guidelines

Self-Assessment Exercise 6

Please note: You will have to refer to current UK physical activity guidelines before completing these questions.

1. Being physically active has which of the following benefits? Please tick all that apply.

A. Strengthens muscles [ ]

B. Improves balance [ ]

C. Weight management [ ]

D. May reduce joint pain [ ]

E. Reduces financial debts [ ]

F. Improves stamina and flexibility [ ]

2. Activities lasting more than … or more have benefit.

A. 3 minutes [ ]

B. 5 minutes [ ]

C. 10 minutes [ ]

D. 30 minutes [ ]

3. Some physical activity is better than none.

True [ ]

False [ ]

4. Avoid sitting for periods of more than…

A. 30 minutes [ ]

B. 1 hour [ ]

C. 2 hours [ ]

D. 3 hours [ ]

4. An easy balance exercise for YOU to try is standing on one leg. If you are a young healthy adult, you should be able to do it with your eyes closed.

Injury and Fall Prevention and the Environment

If you care or support someone with learning disabilities who has experienced an injury or a fall, then an occupational therapist can offer practical advice and assistance.

An occupational therapist uses screening tools - such as HOME FAST (Home Falls and Accidents Screening Tool) [24] – to identify any hazards within the person's home environment, which may cause them to become injured or fall, to address/remove them.

The environment is considered in relation to the individual person; how he/she functions and interacts with (lives in) his/her home environment.

Home Falls and Accidents Screening Tool (HOME FAST)[24]

1. Are walkways free of cords and clutter? Definition: No cords or clutter across or encroaching on walkways/doorways, includes furniture and other items behind doors preventing doors opening fully, raised thresholds in doorways.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
2. Are floor coverings in good condition? Definition: Carpets/mats lie flat/no tears/not threadbare/no cracked or missing tiles – including stair coverings.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
3. Are floor surfaces non-slip? Definition: Score 'no' if lino or tiles are in the kitchen, bathroom or laundry, in addition to any polished floors or tiled/lino surfaces elsewhere. Can only score 'yes' if, in addition to other rooms, the kitchen, bathroom and laundry have non-slip or slip-resistant floor surfaces.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
4. Are loose mats securely fixed to the floor? Definition: Mats have effective slip-resistant backing/are taped or nailed to the floor.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
5. Can the person get in and out of bed easily and safely? Definition: Bed is of adequate height and firmness. No need to pull self up on bedside furniture etc.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
6. Can the person get up from their lounge chair easily? Definition: Chair is of adequate height, chair arms are accessible to push up from, seat cushion is not too soft or deep.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
7. Are all the lights bright enough for the person to see clearly? Definition: No globes (bulbs) to be less than 75 watts, no shadows thrown across rooms, no excess glare.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**

8. Can the person switch a light on easily from their bed? Definition: Person does not have to get out of bed to switch a light on – has a flashlight (torch) or bedside lamp.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
9. Are the outside paths, steps and entrances well lit? Definition: Lights exist over back and front doors, globes at least 75 watts, walkways used exposed to light – including communal lobbies.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
10. Is the person able to get on and off the toilet easily? Definition: Toilet is of adequate height, person does not need to hold onto sink/towel rail/toilet roll holder to get up, rail exists beside toilet if needed.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
11. Is the person able to get in and out of the bath easily? Definition: Person is able to step over the edge of the bath without risk, and can lower themselves into the bath and get up again without needing to grab onto furniture (or uses bath board or stands to use shower over bath without risk).	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
12. Is the person able to walk in and out of the shower recess easily and safely? Definition: Person can step over shower hob, or screen tracks, without risk and without having to hold onto anything for support.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
13. Is there an accessible/sturdy grab rail/s in the shower or beside the bath? Definition: Rails that are fixed securely to the wall, that are not towel rails, and that can be reached without leaning enough to lose balance.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
14. Are slip resistant mats/strips used in the bath/bathroom/shower recess? Definition: Well-maintained slip resistant rubber mats, or non-slip strips secured in the base of the bath or shower recess.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**

15. Is the toilet in close proximity to the bedroom? Definition: No more than two doorways away (including the bedroom door) – does not involve going outside or unlocking doors to reach it.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
16. Can the person easily reach items in the kitchen that are used regularly without climbing, bending or upsetting his or her balance? Definition: Cupboards are accessible between shoulder and knee height – no chairs or stepladders are required to reach things.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
17. Can the person carry meals easily and safely from the kitchen to the dining area? Definition: Meals are carried safely, or transported using a trolley to wherever the person usually eats.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
18. Do the indoor steps/stairs have an accessible/sturdy grab rail extending along the full length of steps/stairs? Definition: Grab rail must be easily gripped, firmly fixed, sufficiently robust and available for the full length of the steps or stairs.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
19. Do the outdoor steps/stairs have an accessible/sturdy grab rail extending along the full length of the steps/stairs? Definition: Steps = more than two consecutive steps (changes in floor level). Grab rail must be easily gripped, firmly fixed, sufficiently robust and available for the full length of the steps or stairs.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
20. Can the person easily and safely go up or down the steps/stairs inside or outside the house? Definition: Steps are not too high, too narrow or too uneven for feet to be firmly placed on the steps (indoors and outdoors), person is not likely to become tired or breathless using steps/stairs, and has no medical factors likely to impact on safety and stairs e.g. foot drops, loss of sensation in feet, impaired control of movement etc.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**

21. Are the edges of the steps/stairs (both inside and outside the house) easily identified? Definition: No patterned floor coverings, tiles or painting which could obscure the edge of the step, adequate lighting of steps/stairs.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
22. Can the person use the entrance door/s safely and easily? Definition: Locks and bolts can be used without bending over or over-reaching, there is a landing so the person does not have to balance on steps to open the door and/or screen door.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
23. Are paths around the house in good repair, and free of clutter? Definition: No cracked/loose pathways, overgrowing plants/weeds, overhanging trees, garden hoses encroaching the walkways.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
24. Is the person currently wearing well-fitting slippers or shoes? Definition: Supportive, firmly fitting shoes with low heels and non-slip soles. Slippers which are not worn and support the foot in a good position. No shoes scores 'no'.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**
25. If there are pets – can the person care for them without bending or being at risk of falling over? Definition: Pets = any animals that the person has responsibility for. To score 'yes' person does not have to feed pets when they are jumping up or getting under foot, person does not have to bend to the floor to refill bowls/dish or clean pets, pets do not require a lot of exercise.	**Yes [ ] No [ ] Not applicable [ ]** **Comments:**

Visual Examples of Environmental Hazards

This is an example of a cluttered and poorly lit living room.

This is an example of inappropriate slippers.

This is an example of hazardous walking surfaces (broken/uneven pavement and cobbled road).

This is an example of patterned flooring which can complicate/create too much fuss within the person's home environment.

Aids and Adaptations

People with learning disabilities can benefit from environmental assessment, and subsequent provision of aids and adaptations, to prevent injuries and falls. People with learning disabilities and the following conditions in particular:

- Epilepsy – to counter major risks of injury during a seizure in e.g. the kitchen, bathroom or stairs.
- Dementia – to adapt the environment in relation to physical and cognitive decline.
- Sensory processing issues – to prevent injuries through perceptual difficulties and/or behaviours which challenge; and perceptual difficulties usually present in people with autism, and people with dementia.

Visual Examples of Aids and Adaptations

This is an example of steps where the edges are clearly marked.

This is an example of a protective cooker guard to prevent injury whilst cooking.

This is an example of a hand/grab rail which is firm and secure.

Proper Use and Compliance

It is extremely important that any aids, adaptations, specialist equipment, which is prescribed by an occupational therapist or physiotherapist, is used properly and well maintained. Previous research has demonstrated that non-use or improper use of specialist equipment can actually contribute towards injuries experienced by people with learning disabilities[25].

If you care for or support someone with learning disabilities who does not use an item of specialist equipment, it is important you notify the person who supplied it (the occupational therapist or physiotherapist), and return it. They will assume the person is continuing to use the item until you tell them that they are not using it.

Behaviours that Challenge

People with learning disabilities can have behaviours which challenge, including destructiveness to property, aggression, and self-injury. These behaviours can lead to injury of self or others, either intentionally (hitting self or another person) or unintentionally e.g. being in a 'bad mood' and slamming a door or drawer on fingers.

If you care for or support someone with learning disabilities who has behaviour/s which challenge, a psychologist, psychiatrist or behaviour nurse specialist are a few examples of health professionals who can provide practical advice and assistance.

Resources: The Environment

A Health and Safety Executive Slips and Trips E-Learning Package (STEP) can be accessed for free at

http://www.hse.gov.uk/slips/step/default.htm

The Royal Society for the Prevention of Accidents web site provides useful information and resources of accident prevention at

http://www.rospa.com/

Self-Assessment Exercise 7

Complete the Home Falls and Accidents Screening Tool for the person with learning disabilities you care for/support, to assess their home environment to ensure it is a safe environment.

If you have identified any issues with their home environment, ACT ON THEM.

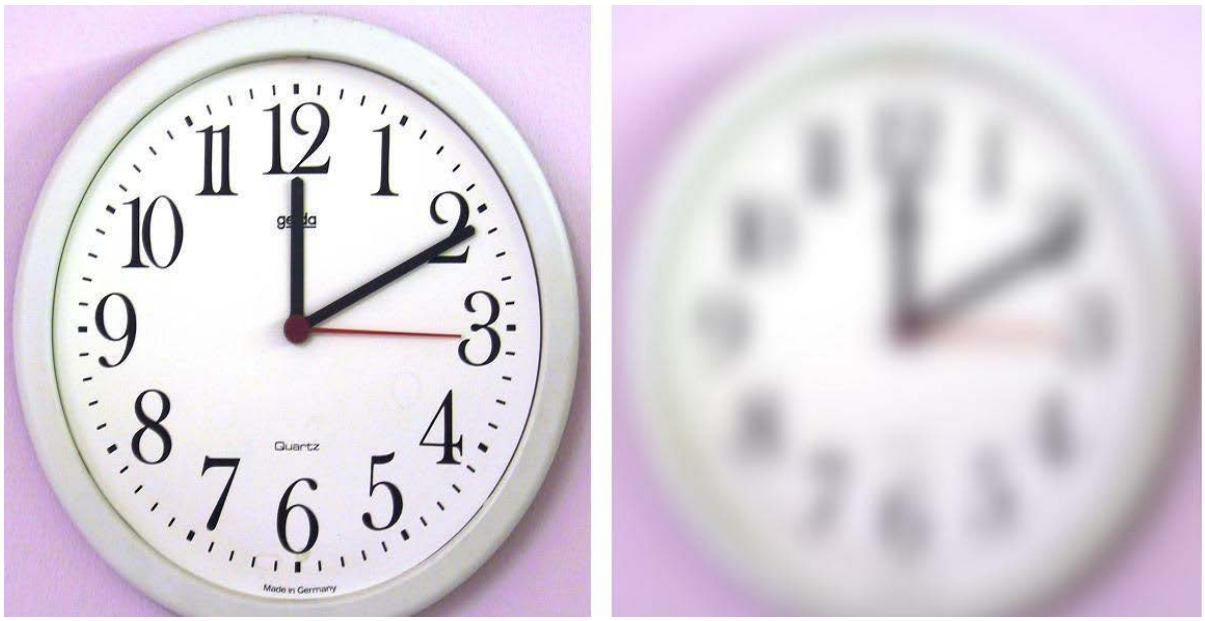
Sight Loss and Risk of Injuries or Falls

People with learning disabilities are ten times more likely to experience sight loss, compared to the general population[26]. Sight loss can be hidden/under-recognised in individuals with learning disabilities. Sight loss can increase a person's risk of experiencing injuries and/or falls; due to a new or existing eye condition, and/or issue/s with processing visual information.

Blurry Vision

An individual with learning disabilities can experience blurry vision if he or she is **short-sighted**, **long-sighted**, has **cataract/s** or **astigmatism**. Blurry vision can impair contrast sensitivity and depth perception; this has a strong association with falls.

This is an example of blurry vision (on the right).



You might notice a person has blurry vision if he or she is experiencing:

- Hesitation or over or under stepping at steps and kerbs

- With worse mobility at night or in dark areas
- Banging into things/being clumsy
- Being off balance
- Searching for things with hands.

Sight Loss

Individuals with sight loss are at risk of injury and/or falling because e.g. objects/obstacles/hazards that are not seen cannot be avoided.

This is an example of visual lower field loss (on the right).

Full Visual Field

Lower Field Loss

These are examples of central (on the left) and peripheral (on the right) field loss.

Causes of central field loss or distortion include **macular degeneration**. Causes of peripheral field loss include **glaucoma** or **retinitis pigmentosa**.

You might notice a person has field loss if he or she is experiencing:

- Difficulty seeing what is in front or off to the sides.
- Over/under stepping or having difficulty on uneven surfaces.
- Out stretched hands or holding furniture when walking.
- Head shaking or scanning when looking at objects.
- With unusual head positions; that may lead to changes in gait when walking.

If the person can only see with one eye, you may notice the person:

- Being clumsy
- Over stepping at steps and kerbs
- Bumping into people, things, doorways etc.
- Misjudging spaces.

Cataracts

If you care for or support someone who has cataract/s, it is important to be aware that cataracts can cause glare issues.

This is an example of a glare.

You may notice the person:

- Screwing up their eyes
- Closing their eyes
- Covering their eyes
- Walking with their head down
- Refusing to go out at night.

Visual Processing

Visual processing can also be problematic for people with learning disabilities if e.g. the environment is too busy. Visual processing issues can include:

- Mobility difficulties, such as depth perception problems, and associated falls
- Patterned and visual crowding, making it difficult to locate items, judge distance, and concentrate
- Increased sensitivity to bright lights or shiny surfaces
- Particular difficulty in seeing in fading or low light.

Visual Example of Visual Processing Issues

This is an example of a patterned carpet which can be too busy, confusing and disorientating/difficult to navigate.

Wearing Glasses

The most common cause of sight loss for people with learning disabilities is **refractive error**.

For many people, glasses are all that is required to improve their vision and, by implication, their social function, independence and quality of life.

Six in 10 people with learning disabilities need glasses, and they often need support to get used to wearing them, and to continue wearing them.

If you care for or support someone with learning disabilities who has prescribed glasses, it is important:

- They are supported/encouraged to wear them
- They are wearing the correct glasses (e.g. if they have been prescribed more than one pair to wear during different activities, such as reading)
- The glasses are kept clean and ready to wear.

Prioritise glasses and remember to follow the **3 C's** – ensuring they are **Correct, Current** and **Clean**.

Making the Most of Vision to Prevent Falls and Injuries

It is important to consider the use of lighting in making the most of a person's vision, and reducing the risk of falls:

- Avoid pools of light or shadows which may be seen as holes or steps, and can lead to falls
- Ensure enough lighting to avoid dark areas where people are more likely to fall
- Consider light bulbs (to ensure you are using appropriate watts)

- Maximise natural night
- Avoid glare from bare bulbs
- Avoid unsuitable window coverings.

This is an example of a pool of light which may be seen as a hole or steps.

Other things you can do to make the most of a person's vision to prevent or reduce falls are:

- Improve contrast in the visual environment to improve independence
- In terms of layout, provide a consistent (familiar) environment and avoid clutter
- Understand the person's vision needs in relation to their mobility, and provide appropriate mobility support as necessary.

This is an example of providing contrast to promote/improve the visual environment.

Routine Eye Care

All adults (aged 16 – 60 years) should visit their optician every two years for routine eye health care/examination (more often if needed). Children (under 16 years of age) and the elderly (over 60 years of age) should visit their optician every year[26].

It is extremely important that the person you care for/support accesses and maintains routine eye health care/examinations, whether or not they have been identified as having a vision problem/sight loss. It is important for promoting/maintaining health and wellbeing.

Resources: Sensory Impairments

The RNIB provides training, support and resources for people with sight loss, and those who care for/support them at http://www.rnib.org.uk

Action on Hearing Loss provides training, support and resources for people with hearing loss, and those who care for/support them at http://www.actiononhearingloss.org.uk/

People with hearing loss also require support and assistance to prevent injuries and falls.

Self-Assessment Exercise 8

1. People with learning disabilities are … times more likely to experience sight loss, compared to the general population

A. Five times more likely [ ]

B. Ten times more likely [ ]

C. Twenty five times more likely [ ]

D. Fifty times more likely [ ]

2. Blurry vision can be experienced if a person … (Please tick all that apply)

A. Is short-sighted [ ]

B. Is long-sighted [ ]

C. Blind [ ]

D. Cataracts [ ]

3. If a person is screwing up or closing their eyes, then they may be experiencing …

A. Problems with their depth perception [ ]

B. Glare [ ]

4. What is the most common cause of sight loss for people with learning disabilities? (Please write your answer)

5. What percentage of people with learning disabilities need to wear glasses?

A. 10% [ ]

B. 30% [ ]

C. 50% [ ]

D. 60% [ ]

6. What are the 3 C's to remember and follow when supporting a person with learning disabilities to wear their glasses? (Please write your answer)

7. Adults should visit their optician every … year/s

A. One year [ ]

B. Two years [ ]

C. Three years [ ]

D. Five years [ ]

8. When was the last time the person you care for/support had an eye test? Are they due an eye test? If they are, ACT.

Self-Assessment Exercises Answers

Self-Assessment Exercise 1:

1C, 2A, 3A, 4C, 5B, 6C, 7B, 8B

Self-Assessment Exercise 2:

1. Epilepsy and hypotension (which can cause dizziness). 2. Water puddle on the floor, night light not working, and new bathroom rug. 3. Change the light bulb in the table lamp.

Self-Assessment Exercises 3 & 4:

Reflective self-assessment exercises: No correct answers.

Self-Assessment Exercise 5:

1C, 2B, 2C, 2E, 2F, 3A, 4C, 5 cooling reduces immediate pain and reduces risk of scarring in the long-term.

Self-Assessment Exercise 6:

1A, 1B, 1C, 1D, 1F, 2C, 3 True, 4C

Self-Assessment Exercise 7:

Practical exercise: No correct answers.

Self-Assessment Exercise 8:

1B, 2A, 2B, 2D, 3B, 4 Refractive error, 5D, 6 Correct, Current and Clean, 7B

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