## Table 22: Supporting students with SEND and medical conditions in PESSPA

Condition	What Do Staff Need to Know?	Advice for Staff Teaching and Supporting PESSPA
Asthma www.asthma.org.uk	<ul> <li>Very common condition affecting many children, caused by a combination of genetic and environmental factors.</li> <li>Can be triggered by viral infections, allergens (eg dust mites), irritants (eg air pollutants), and the onset of exercise in some instances.</li> <li>Symptoms include coughing, wheezing, shortness of breath, tight chest.</li> <li>Mild attack: the student should sit, try to relax, breathe out, and use an inhaler if required.</li> <li>Severe attack: access prompt medical support.</li> <li>Exercise is generally beneficial for children with asthma, leading to improved cardiorespiratory fitness and reduced breathlessness at a given exercise intensity.</li> </ul>	<ul> <li>Ensure that their inhaler (and spacer) is available when exercising.</li> <li>Encourage them to use their inhaler (reliever) approximately five minutes prior to warm-up if exercise usually triggers asthma.</li> <li>Ensure that they warm up and cool down thoroughly, this should last at least 10 minutes.</li> <li>Increase intensity of physical activity gradually.</li> <li>Discourage participation in physical activity when the air is affected by known trigger elements (eg grass cutting pollens, dust, pollutants such as cigarette smoke, car exhaust fumes, changes in temperature).</li> <li>Allow the child to stop exercising if symptoms occur, and use the reliever inhaler to relieve the symptoms until they are ready to resume.</li> </ul>
Attention deficit hyperactivity disorder (ADHD) www.addiss.co.uk	<ul> <li>Children with ADHD find it difficult to concentrate and remember instructions.</li> <li>In some cases, medication is used to help students focus.</li> </ul>	<ul> <li>Provide and repeat clear, easy-to-follow instructions.</li> <li>Reward and encourage achievement to retain focus.</li> <li>Be consistent in approach.</li> <li>Risk assess activities to ensure that they can be safely managed by the staff and students.</li> </ul>

Condition	What Do Staff Need to Know?	Advice for Staff Teaching and Supporting PESSPA
Condition Autism/autistic spectrum disorder (ASD)/Asperger's syndrome www.autism.org.uk www.autismeducationtrust.org.uk www.afpe.org.uk for hyposensitivity	<ul> <li>What Do Staff Need to Know?</li> <li>Students display a range of symptoms dependent on where their condition sits within the spectrum.</li> <li>Those with very mild conditions may not be diagnosed.</li> <li>Many have difficulty processing everyday sensory information such as sounds, sights, and smells, and will display either an oversensitive (hyper) or under-sensitive (hypo) reaction to these.</li> <li>Some may find interaction and conversation with others difficult, interpreting jokes or sarcasm literally (eg if they were told to 'pull their socks up' as an instruction to work harder, they would interpret this in its literal sense).</li> <li>They like routine and order, and find change unsettling.</li> <li>Noise and crowded conditions make them anxious.</li> </ul>	<ul> <li>Advice for Staff Teaching and Supporting PESSPA</li> <li>Speak clearly, and allow time for instructions and expectations to be understood.</li> <li>Prepare students if manual support is required in PESSPA activities – some students are intolerant to touch.</li> <li>Encourage, and give both verbal and visual prompts.</li> <li>Prepare students thoroughly for the activity they will be doing by showing photographs, video and demonstrations, and sharing plans.</li> <li>Be mindful that they might react adversely to noise and multiple activity (eg if sharing a sports hall space, in a busy swimming pool environment or using loud music, they might find it difficult to filter out noise that others would be able to ignore).</li> </ul>
	• Noise and crowded conditions make them anxious.	<ul> <li>Be prepared to provide support with spatial awareness if this is needed.</li> </ul>

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Brittle bones www.brittlebone.org	<ul> <li>A condition brought on by lack of collagen – a protein within parts of the body, including the bones, that provides structure and strength.</li> <li>Bones are prone to fractures.</li> </ul>	<ul> <li>Make staff and other students aware of the situation.</li> <li>Develop a clear understanding of the extent of the condition.</li> <li>Plan activities that reduce the risk of injury while still enabling activity (eg individual activities rather than activities in large groups).</li> </ul>
Cerebral palsy www.scope.org.uk	<ul> <li>Caused by damage to, or failure in the development of, the motor areas of the brain before or during birth, or in the first few years of life.</li> <li>May be affected in one or a combination of ways: Spastic: <ul> <li>Increased muscle tone, resulting in restricted movement.</li> <li>Sudden movements extending the back and neck.</li> <li>Swallowing and speech difficulties.</li> <li>In some cases, cognitive development is affected.</li> </ul> </li> <li>Athetoid: <ul> <li>Novements and uncontrolled motion.</li> <li>Speech, hearing and sight may be impaired.</li> </ul> </li> <li>Ataxic: <ul> <li>Movements are slow and awkward.</li> <li>There is a lack of directional control and balance, which may result in falls.</li> </ul> </li> </ul>	<ul> <li>Develop a clear understanding of the range of conditions.</li> <li>Check for understanding of instructions, use demonstration where helpful.</li> <li>Work with specialists to assess the specific needs of each student, and plan activity accordingly.</li> <li>Ensure other students are mindful of space required for wheelchairs or other mobility aids where used.</li> <li>Allow sufficient time for movement about the area.</li> </ul>

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Congenital heart conditions www.chfed.org.uk www.bhf.org.uk/heart-health/yheart	<ul> <li>These are conditions that some children are born with.</li> <li>There are a range of different conditions. Some never require treatment, others have no cure.</li> <li>A range of symptoms might be seen, including unexplained breathlessness, tiredness, palpitations, dizziness, fainting or collapsing.</li> <li>Common medications include diuretics (to reduce excess fluid), anticoagulants (to prevent the blood clotting) and anti-arrhythmic medicine (to control the rhythm of the heart).</li> <li>Regular physical activity can improve the function of the heart and circulation.</li> </ul>	<ul> <li>PESSPA lessons should be adapted to allow students to take part at their own level and pace (eg lower intensity, longer rests).</li> <li>Students should be encouraged to work to a level where they can feel warm and slightly 'out of puff', but can still talk. If they become too breathless to talk, they need to slow down or stop and rest.</li> <li>The warm-up and cool-down are very important and should last at least 10 minutes to allow for a gradual increase in heart rate and breathing.</li> <li>Appropriate intensity of dynamic activity (eg walking, running, swimming, dancing) is more suitable than static (isometric) activity – where the pressure is loaded on the heart, and there is a sudden rise in systolic blood pressure, which can be difficult to control. For this reason, static exercises and stretching should also be avoided.</li> </ul>
Cystic fibrosis (CF) www.cysticfibrosis.org.uk	<ul> <li>An inherited condition where glands in the body (primarily the pancreas) secrete excessive mucus, leading to blockages, which can prevent food being broken down and absorbed.</li> <li>Sweating can produce additional mucus in hot weather and after exercise.</li> <li>Lungs needs to be kept clear and physical activity monitored.</li> <li>Participation in physical activity is very important for students with CF because it helps clear mucus from the lungs, and improves physical bulk and strength.</li> </ul>	<ul> <li>Encourage students with CF to take part in as much physical activity as possible, ideally types of exercise that leave them out of breath, like running, swimming, football or tennis.</li> <li>Recognise when a student with CF feels unusually tired and lacks energy after a cold or chest infection, to which they are prone.</li> </ul>

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Diabetes www.diabetes.org.uk	• A condition where the amount of glucose (sugar) in the blood is too high because the body cannot use it properly due to either no insulin being produced (type 1 diabetes) or insufficient insulin produced (type 2 diabetes).	• Encourage physical activity as part of a planned and managed programme as it stimulates the action of the insulin by lowering blood sugar through the use of the sugar in the muscles.
	<ul> <li>In children under the age of 18, type 1 is the most common form, although the number of children affected by type 2 is increasing.</li> <li>Children are an energy and to should their blood although the single set of the set o</li></ul>	• Know how to react to the onset of <b>hypo</b> glycaemia (when the brain is starved of glucose energy), and how to look for and identify early symptoms such as tiredness, loss of alertness, muscle strength, and coordination.
	• Children are encouraged to check their blood glucose level before taking part in physical activity. Where it is lower than recommended, they should have a snack before starting the activity.	• Recognise signs of <b>hyper</b> glycaemia – students will feel ill if blood sugars are too high, and if they have type 1 diabetes, will need to test their blood sugars and, if required, their ketones to determine if they need to correct their sugars with insulin.
		• Be aware of those students who have an insulin pump, and never insist that it is removed.
		• Check that the student has the items they may need close at hand (eg blood glucose testing kit, food, glucose tablets, drinks), and allow them to use these at any time. Physical education departments are advised to keep some sugared energy drinks available in preference to snacks in case they are required, following recent advice.
		• Inform students well in advance about how long and how intense the physical activity session will be so that they can prepare by eating sufficient snacks.
		• Check that the student has carried out a blood glucose check before starting activity.
		• Build up physical activity programmes gradually.

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Down's syndrome (DS) www.downs-syndrome.org.uk	<ul> <li>Sometimes referred to as trisomy-21, due to the failure in cell division of chromosome 21, leading to the development of 47 rather than 46 chromosomes.</li> <li>Every student with DS will have different needs and conditions.</li> <li>Students with DS may have reduced muscle tone, heart conditions, hearing and vision difficulties, respiratory difficulties, and learning difficulties.</li> <li>Students with DS may suffer from instability and acute dislocation of the atlanto-axial joint. They may experience pain behind the ear or in the neck. There may be a deterioration of posture, manipulative skills, or bowel and bladder control – these symptoms require specialist advice.</li> </ul>	<ul> <li>Break down instructions or tasks into short, manageable chunks, and speak directly to the student to check that they have understood.</li> <li>Use demonstrations, signs and gestures.</li> <li>Collisions should be avoided.</li> <li>Jumping or diving into water is not advised.</li> <li>Proceed with extreme caution when using trampolines – this activity may be high risk due to risk of damage to the atlanto-axial joint.</li> <li>Offer frequent praise and encouragement.</li> <li>Allow students who may have associated heart conditions to rest if they complain of tiredness.</li> </ul>
Dyspraxia www.dyspraxiafoundation.org.uk	<ul> <li>The condition presents an immaturity in movement, displaying 'clumsy' action.</li> <li>Poor balance and coordination of body parts.</li> <li>Difficulty with gross and fine motor skills.</li> </ul>	<ul> <li>Give clear instructions, allowing the student to position him/herself safely at each stage. They may require help with placing their hands and feet correctly.</li> <li>Use cones, marker lines and spots to direct the student back to their work area.</li> <li>Have a variety of equipment, such as larger bats and slower balls, available to accommodate coordination challenges.</li> <li>Encourage the development of skills as an individual, rather than incorporating them into team activities.</li> <li>Think about the activity surface – running on a track may be acceptable, but a rough cross-country course would be difficult.</li> </ul>

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Epilepsy	• The effects of epilepsy vary from person to person.	• Organise a support system, such as a 'buddy system'.
www.epilepsynse.org.uk www.epilepsyresearch.org.uk	• The condition is characterised by seizures originating in the brain as a result of excessive or disordered discharge of brain cells.	• Be aware that prolonged periods underwater, and environments with strobe or flickering lighting may cause seizures.
www.epilepsy.org.uk	<ul> <li>Some children may never have a seizure at school.</li> <li>Participation in physical activity is dependent on each individual's condition.</li> </ul>	<ul><li>Be vigilant when students are working at height (eg in gymnastics or on a climbing wall).</li><li>Know how to respond if a seizure occurs.</li></ul>
Foetal alcohol spectrum disorder (FASD) www.fasdtrust.co.uk www.fasdnetwork.org www.nofas-uk.org www.afpe.org.uk for hyposensitivity	<ul> <li>This condition occurs as a result of the mother consuming high levels of alcohol during pregnancy, which results in the development of the foetus being affected.</li> <li>Physical signs around the face include low nasal bridge, short nose, thin upper lips, and minor ear abnormalities.</li> <li>Symptoms are similar to those on the autistic spectrum – fine and gross motor skills tend to be poor, students find it difficult to sit still and concentrate.</li> <li>Motivation is low, there may be the appearance of 'daydreaming' or laziness.</li> <li>Spatial awareness is poor.</li> <li>Either hypo (under) or hyper (over) sensitivity (see Autism) is experienced in relation to touch, smell, pain and noise.</li> <li>Students can master a task one day, and forget how to do it the next day.</li> <li>Physical activity can be very beneficial for students with FASD.</li> </ul>	<ul> <li>Explain tasks simply and thoroughly.</li> <li>Use simple and brief language, providing key safety points.</li> <li>Repeat instructions.</li> <li>Provide practical demonstrations for clarification.</li> <li>Allow students to work at their own pace.</li> </ul>

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Haemophilia www.haemophilia.org/inhibitors	<ul> <li>A hereditary condition that mainly affects boys.</li> <li>The blood-clotting mechanism is affected, and bleeding following a minor incident may be life-threatening, although levels vary.</li> <li>By secondary school age, students generally treat themselves with a blood-clotting factor that is injected, usually into existing cannula in their veins.</li> <li>Participation in PESSPA activities is encouraged as it strengthens joints and muscles, which helps to improve stability and coordination.</li> </ul>	<ul> <li>Ensure that the severity of the condition is known and implications understood.</li> <li>Make provision for participation in individual and small-sided or individual PESSPA activities (eg swimming, badminton).</li> <li>Ensure that activities such as basketball, netball and athletics are well controlled.</li> <li>Avoid involving these students in contact sports such as rugby, martial arts or boxing.</li> <li>Ensure that students carry out a thorough warm-up before activity and that they have had their blood-clotting factor infusion prior to taking part in any physical activity.</li> <li>Ensure that full PPE and, in some cases, additional protective equipment such as knee pads and wristbands are worn, when appropriate.</li> </ul>
Hearing impairment www.actiononhearingloss.org.uk www.ndcs.org.uk www.mid.org.uk	<ul> <li>Conductive hearing loss is a condition often caused by a build-up of fluid, such as in glue ear, in which sounds cannot pass through the outer or middle ear.</li> <li>This condition is generally temporary, and can clear up or may require surgery.</li> <li>Sensorineural deafness is a condition caused by a problem in the inner ear or auditory nerve that may affect a person's speech and balance, and is likely to be permanent.</li> </ul>	<ul> <li>Ensure that the student can clearly see the member of staff when instructions are given or demonstrations carried out.</li> <li>Establish eye contact before starting to give instructions.</li> <li>Be mindful of activities that require good balance, particularly in gymnastics and dance.</li> <li>Use gestures and visual alternatives to auditory prompts, particularly in relation to a 'stop' command when there is danger.</li> <li>Check understanding regularly.</li> </ul>

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Hydrocephalus www.headway.org.uk/ hydrocephalus.aspx	<ul> <li>Caused by an obstruction in the circulation of the cerebro-spinal fluid around the spinal cord and brain.</li> <li>The accumulation of this fluid in the brain can lead to a variation in the severity of damage caused by pressure on the brain cells.</li> <li>In most cases, to relieve this pressure, a valve or shunt is inserted behind the ear just below the skin.</li> <li>Students struggle to store information.</li> </ul>	<ul> <li>Break down tasks/instructions into small stages for safety.</li> <li>Talk through tasks, in addition to providing practical demonstrations.</li> <li>Support students, and be prepared to adapt activities that require judging distance and direction.</li> <li>Encourage all activities, including contact sports. There is very little problem with shunts being damaged during activity or minor falls. Advice to avoid contact sports is very much in the minority.</li> </ul>
Multiple sclerosis www.nationalmssociety.org	<ul> <li>This condition disintegrates the nerve fibres over time in a random way so that progress of the disease can vary and be at different paces.</li> <li>Those affected may experience spasticity, difficulties with attention and balance, blurred or loss of vision, incontinence, loss of memory, and speech problems.</li> <li>It is more common in adults, but some students are diagnosed while still at school.</li> <li>Swimming is a particularly beneficial and safe activity when supported correctly.</li> </ul>	<ul> <li>Be vigilant to the changes in symptoms, which may vary from week to week.</li> <li>Provide clear, brief instructions.</li> <li>Repeat instructions.</li> <li>Check regularly with the student about the clarity of their vision, and notice signs that vision has deteriorated.</li> <li>Ensure that students work on even surfaces and are made aware of surface issues that might make them lose their balance.</li> </ul>

Condition	What Do Staff Need to Know?	Advice for Staff Teaching and Supporting PESSPA
Muscular dystrophy www.muscular-dystrophy.org	<ul> <li>Relates to a group of conditions characterised by a breakdown of muscle fibres, leading to weak and wasted muscles.</li> <li>The condition exists on a continuum from severely disabled to only a mild disability.</li> <li>The condition is progressive, but at variable pace.</li> <li>The most prevalent type, Duchenne, sees symptoms appear usually before the age of five.</li> <li>Early signs include difficulty when running, standing and climbing stairs.</li> <li>Swimming provides appropriate and safe activity.</li> </ul>	<ul> <li>Clarify manual handling issues with wheelchair users, and provide guidance on whether the student can get out of the chair for activity.</li> <li>Be aware of frequent changes in the student's physical condition.</li> </ul>
Spina bifida www.spinabifidaassociation. org	<ul> <li>A congenital condition through which a deformity in the spine causes damage to the nerves that communicate movement and feeling.</li> <li>At its most severe, there will be a complete loss of motor and sensory function below the area of damage.</li> <li>The extent of the disability is dependent on the position and severity of the damaged area.</li> <li>Symptoms are generally paraplegia and a wasting of the lower limbs.</li> <li>Students with this condition may also have hydrocephalus (see above).</li> <li>Students tend to have little feeling in their lower limbs and are not aware of the pain when they bang into objects or walls (while in their wheelchair).</li> </ul>	<ul> <li>Adapt activities to make them safe for students who are using wheelchairs or other mobility equipment.</li> <li>Provide clear instruction, and repeat regularly.</li> <li>Use modified equipment when students are in wheelchairs (eg shorter sticks, slower-paced balls).</li> <li>Avoid 'tagging' the wall as a 'safe' zone.</li> </ul>

Condition	What Do Staff Need to Know?	Advice for Staff Teaching and Supporting PESSPA
Social, emotional and behavioural difficulties www.sebda.org	<ul> <li>A range of responses are required to different needs.</li> <li>Many students with social, emotional and behavioural difficulties will lack confidence, and may develop a perceived sense of failure that can lead to refusal to participate in physical activity. This may in turn lead to disruptive behaviour.</li> <li>Some students prefer to avoid large-group and team games, where they might be overwhelmed or intimidated, whereas others are motivated by these situations.</li> </ul>	<ul> <li>Gauge the 'mood' of students. Be aware that they may have been affected by incidents prior to the lesson.</li> <li>Be prepared to be flexible in making adaptations as necessary to accommodate the 'mood' of the students.</li> <li>Set achievable targets for each student.</li> <li>Vary activities frequently to keep students on task and interested.</li> <li>Encourage an ethos of praise for themselves and each other.</li> <li>Discuss safety with the students, and encourage them to understand how they can contribute to safe practice.</li> <li>Allow time for students to cool down and relax at the end of a lesson.</li> </ul>
Visual impairment www.rnib.org.uk	<ul> <li>This impairment exists along a continuum, from being able to manage with or without support to those who are registered blind and will need specialist support.</li> <li>Those students who have a degree of sight may still struggle with moving objects and people moving quickly in a PESSPA environment.</li> <li>Students are usually encouraged to be independent with regard to mobility and movement around the facility.</li> <li>Eye conditions, such as a history of retinal detachment, mean that activities such as trampolining, diving and contact sports should be avoided.</li> </ul>	<ul> <li>Be prepared to modify tasks as necessary.</li> <li>Use modified equipment such as balls with bells, and buzzers attached to goals or targets.</li> <li>Use brightly coloured tape on walls, and brightly coloured equipment.</li> <li>Provide clear and precise instructions.</li> <li>Give accurate spatial instructions (eg size of area of pitch or hall, fixed objects within that space).</li> <li>Remove obvious hazards from the working area.</li> <li>Provide opportunities to take part in individual personal fitness activities.</li> <li>Allow the use of glasses or peaked caps if bright light is a problem.</li> <li>Position the student in the optimum place for vision, taking account of sunlight and glare.</li> </ul>



For more information regarding SEND and medical conditions:

The National Co-ordinating Committee – Swimming for People with Disabilities (no date) 'Let's All Swim'

British Heart Foundation National Centre (2015) 'Physical activity for all – Physical activity for children and young people with medical conditions', http://goo.gl/qZTRnI