Our vision is of a world without barriers for every deaf child.
Introduction
Glue ear is one of the most common childhood illnesses.

Children under the age of five are the largest group affected, though for some it can persist into adolescence. It is widely accepted that glue ear can cause temporary deafness, delayed speech development in young children and affect children’s behaviour and their educational progress.

Glue ear is often, but not always, linked with ear infections. It can sometimes develop unnoticed. Changes in behaviour, becoming tired and frustrated, lack of concentration, preferring to play alone and not responding when called may indicate glue ear. These signs can often be mistaken for stubbornness, rudeness and being naughty. As a result many children with glue ear are misunderstood or labelled as ‘difficult’.

A prolonged period of time with reduced hearing can affect the way in which a child’s speech develops. For example, parts of words may not be pronounced clearly. Children with glue ear may also fall behind at school and become disruptive if they do not have extra support.

Note: NDCS uses the word ‘deaf’ refers to all levels of hearing loss.
What is glue ear?
For ears to work properly the middle ear needs to be kept full of air. The air travels through the eustachian tube which runs from the middle ear to the back of the throat. In children this tube is not as vertical and wide as it will be when they get older and as a result doesn’t work as well. If the eustachian tube becomes blocked, air cannot enter the middle ear. When this happens, the cells lining the middle ear begin to produce fluid. This is like a runny liquid which can get thicker as it fills the middle ear.

With fluid blocking the middle ear, it becomes harder for sound to pass through to the inner ear. This can make quieter sounds difficult to hear. It can be like listening to the world with both fingers stuck in your ears. It’s hard work, try it for yourself! If your child has glue ear they can’t always hear everything that you say, so it’s no wonder they’re tired and irritable or just want to be left on their own.
What conditions influence glue ear?
There are many different things that can contribute to glue ear. These include colds and flu, allergies and passive smoking. Children with cleft palate, or with genetic conditions such as Down’s syndrome, may be more likely to get glue ear as they often have smaller eustachian tubes that do not function as well as they should.

What treatment is available?
If you are worried about your child’s hearing, arrange an appointment with your family doctor (GP). Often glue ear is associated with a heavy cold and will clear up when the congestion from the cold has gone. Your GP will examine your child’s ears and should be able to tell if glue ear is present. If there is any pain or sign of infection your GP may prescribe a course of antibiotics. Your GP may want to wait to see if the glue ear clears up by itself before referring your child on to the hospital. If the symptoms continue ask your GP to refer you to the ear, nose and throat (ENT) department at your local hospital.
At the clinic
A specialist doctor will examine your child’s ears and a further assessment will be carried out. This will include a tympanometry test, which measures how well the eardrum can move. If there is fluid in the middle ear the eardrum will not work properly. The test should take about a minute to do. A graph (called a tympanogram, see diagram below) will show the results straight away. A hearing test should also be done to check if the glue ear is affecting your child’s hearing and by how much. The tests used will depend on your child’s age. See the free NDCS resource Understanding your Child’s Hearing Tests for further information.

The specialist doctor should explain the results of all the tests used and discuss the best way to treat your child. It is a good idea to monitor the glue ear with repeated tests at least three months apart. This is known as ‘watchful waiting’. For most children, the glue ear will clear up in this time. If it has not, you may be offered grommets or temporary hearing aids.

An example of a tympanogram

The line for a child without glue ear is curved

The line for a child with glue ear is flat
**Grommets**
These are tiny plastic tubes that are put in the eardrum. This is done during a short operation in hospital under general anaesthetic. The grommets are inserted after the fluid in the middle ear has been drained away. The grommets allow air to circulate in the middle ear and stop more fluid from building up. The surgeon may talk to you about removing your child’s adenoids at the same time. Adenoids are glands that sometimes become infected and swollen, and block the end of the eustachian tubes.

Grommets usually stay in until the eardrum has healed and pushed them out. Sometimes the fluid comes back and another grommet operation may be considered. The specialist doctor should always discuss any risks of operating again with you before you make a decision.

If you decide to have grommets you may like to read *Harvey gets Grommets* with your child. This is a comic produced by NDCS aimed at children under 8 years and explains the process of having hearing tests and grommet surgery.

Children’s hearing can be affected for long periods of time while waiting to see if the glue ear clears up naturally or while on the waiting list to have the grommet operation. It is important to make sure that a child’s speech and education does not suffer during this time. You may want to consider hearing aids or asking for extra support at school.
Hearing aids
Hearing aids can be useful for children with any level of deafness. There are different types of hearing aid that are suitable for children with glue ear. Most hearing aids work by amplifying (making louder) sounds going into the ear. Good quality, digital hearing aids are available free of charge for all children on the NHS. Most children use behind the ear hearing aids in each ear.

If you would like more information about hearing aids you can download the booklet *Hearing Aids: Information for families* from our website at www.ndcs.org.uk.

General health
Breastfeeding
Research suggests that breastfeeding may reduce the risk of babies and young children developing glue ear. It is thought that breast milk contains proteins which can help stop inflammation and help to protect against glue ear even when breastfeeding has stopped.

Smoke free environment
Research carried out by the Department of Health has shown that all children are more likely to get ear infections and glue ear if they are often in a smoky environment. A child is likely to experience glue ear for as long as the environment remains smoky.

Parents should try to make their children’s environment smoke free. The environment includes the home, car, crèche, playgroup or school. If it is not possible to make the environment entirely smoke free, then smoking should be confined to an area not used much by children. It is important to remember that simply opening
a window is not enough, as many dangerous smoke particles will stay in the air.

**Can complementary remedies help?**

In 2008, the National Institute for Health and Clinical Excellence (NICE) published guidance about glue ear for the NHS in England and Wales. Having studied all the research evidence currently available they made recommendations on the use of various treatments for glue ear. Their recommendations are based on the treatments that effectively treat glue ear for the greatest numbers of children who have the treatment. For some treatments there may be very little or poor quality evidence available that has been documented. This might be because it is still quite a new treatment. Alternatively the treatment may be offered by the alternative or complementary health sector which does not tend to produce the type of scientific research evidence reviewed by NICE. NICE recommends grommets or hearing aids as effective treatments for glue ear.

**At the current time NICE does not recommend using:**

- Steroids
- Antihistamines
- Decongestants
- Antibiotics
- Homeopathy
- Cranial osteopathy
- Acupuncture
- Massage
- Probiotics
- Changing the diet (eg to reduce dairy)
- Immunostimulants

A copy of the guidance written for patients and carers is available to download from NICE [http://guidance.nice.org.uk/CG60/PublicInfo](http://guidance.nice.org.uk/CG60/PublicInfo).

Because parents frequently contact us to ask about alternative or complementary treatments for glue ear we have written a separate factsheet. Some of the treatments may help some children and parents may like to consider trying them. Contact the NDCS Freephone Helpline for a copy of our factsheet.
Treatments for Glue Ear.

How can I make hearing easier for my child?
It is important that glue ear is identified as soon as possible and that parents and teachers know how it can affect children’s hearing. Basic communication tips can help to make listening easier for your child.

It is important to get your child’s attention before you start talking. Make sure you face your child as much as possible and keep eye contact. Check that background noise is kept to a minimum. Speak clearly without shouting and maintain your normal rhythm of speech.

The teacher or school nurse may realise that your child is having problems, but may not be aware that this is because of their hearing. It is important that you tell the teacher about your child’s hearing so that arrangements can be made in school to help. It is important that your child is able to sit near the teacher in the classroom, that they understand what is said and that they are not made to feel awkward about asking for things to be repeated.
Did you know we have a Freephone Helpline?

“It is so nice to have people willing to listen and help.”
Parent

If your child has glue ear we’re here for you. We offer information and support to parents and professionals.

Our Freephone Helpline is open:
Monday to Thursday
9.30am–9.30pm
Friday
9.30am–5pm

You can get in touch with us on 0808 800 8880, at www.ndcs.org.uk/live or helpline@ndcs.org.uk.

Questions?
Phone us
0808 800 8880

There’s lots more we can do for you – visit www.ndcs.org.uk to find out more.
NDCS is the leading charity dedicated to creating a world without barriers for deaf children and young people.

NDCS Freephone Helpline: 0808 800 8880 (voice and text)

Email: helpline@ndcs.org.uk

www.ndcs.org.uk

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