

## BRIEFING PAPER

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**Date:** 26<sup>th</sup> July 2018

**Subject:** Radio aid usage with children aged under 36 months

### Summary

Research has continually highlighted the benefits that radio aids and FM systems offer deaf infants and young children to overcome barriers to language and communication, and quality standards state that “Every deaf child should be considered as a potential candidate for provision of a personal radio aid as part of their amplification package, at first hearing aid fitting” (NDCS & UK Children’s FM Working Group, 2017). Despite this, the National Deaf Children’s Society has noted a recent increase in the number of families being denied access to these technologies over safety concerns – particularly choking hazards posed by small parts such as batteries, audio shoes and FM receivers. This paper outlines the National Deaf Children’s Society’s position on the safe and effective use of radio aids by children aged under 36 months and offers guidance to mitigate against safety hazards.

### Background and Analysis

Hearing aids are known to present potential hazards to babies and young children, such as removing from them their ears, taking them apart, putting in their mouths, and removing batteries. As such parents should always be advised that babies and young children are never left alone whilst wearing their hearing aids. In recent years battery locks have been made available as common safety features on hearing aids most often used by children. This helps to prevent some of the danger of wearing hearing aids, but not all, such as choking due to small parts.

Traditionally, the use of an FM system with a hearing aid(s) would require the installation of three separate parts – a hearing aid, audio shoe and FM receiver. In most instances these component parts are ‘push fit’ for quick and easy assembly. In some cases, the use of an audio shoe prevents the use of lockable battery compartments being fitted to a child’s hearing aids. Subsequently, there are concerns amongst health professionals and Early Years practitioners that these parts could be disassembled by infants and young children and pose a danger by removing and swallowing a battery, or a choking hazard to themselves and/or other children.

Product manufacturers such as Phonak now offer integrated receivers as an alternative to the traditional 3-part assembly. An integrated receiver does not mean that it is internal to the hearing aid. Instead, it is a combined battery drawer, audio shoe and FM receiver that is fitted as a single unit to the hearing aid. Essentially, it means that there is no longer a requirement to have each of the 3 individual parts and there is less risk to a child removing a shoe. The integrated receivers can be size and colour matched to the hearing aid and usually come with water resistant properties.

Integrated receivers may be available with tamper proofing options that allows the integrated receiver to lock securely to the hearing aid, and mitigate against the risk posed by small parts. These are available for around £13.

For example, the following product comparison shows that there is little difference in cost between a traditional 3-part assembly and an integrated receiver with tamperproof battery compartments.

*Table 1 - Roger x (02) receiver and AS10 audio shoe (accurate as of July 2018)*

Part Number	Product	Unit Price (£)	Quantity	Total (£)
052-3113-D02P6	Roger X (02)	487	1	487
054-0022-xx	AS10	16	1	16
			Total	503

*Table 2 - Roger 18 integrated receiver (accurate as of July 2018)*

Part Number	Product	Unit Price (£)	Quantity	Total (£)
052-3281-D02xx	Roger 18 integrated specify colour	498	1	498
			Total	498

*Table 3 Roger 18 integrated receiver with tamperproof conversion kit (accurate as of July 2018)*

Part Number	Product	Unit Price	Quantity	Total (£)
052-3281-D02xx	Roger 18 specify colour	498	1	498
	Tamperproof kit conversion - specify colour	13	1	13
			Total	511

When integrated receivers and/or tamper proofing options are not available for a child under 3 years who requires a radio aid, parents must be given clear information on the risks and benefits of using the technology, use of the radio aids in different environments, daily care of the equipment, and steps they need to take to ensure their child is able to use the technology safely. Parents should be able to make an informed choice on whether or not to use radio aids based on the information received and fully understanding the supervision needs required.

## **Recommendations**

The National Deaf Children's Society do not believe that children of this age should be denied access to FM technologies when there are solutions available that can allow them to overcome barriers to language and communication in a safe and secure manner. We do not feel that cost for a tamperproof solution should be a justification for denying a child access to a radio aid, as we have demonstrated that there is very little difference in cost between different solutions

We recommend that:

- Professionals fully explore the range of options available to allow deaf infants and young children to safely use radio aids.
- Wherever possible, deaf infants and young children are provided with integrated receivers and tamperproof battery locks to allow them safely to FM systems. But if these aren't available that parents are given clear and unbiased information on the risks and benefits that enables them to make an informed choice on using an alternative radio aid with their deaf child.

## **Notes:**

Professionals and practitioners should be aware that:

- Roger transmitters can be fitted to any make and model of hearing aid by using the correct audio shoe
- Integrated Phonak receivers are only compatible with Phonak hearing instruments and selected cochlear implants from Cochlear, MED-EL and Advanced Bionics (AB)
- Phonak receivers can only be used with a Phonak transmitter

**References:**

Quality Standards for the use of personal radio aids; Promoting easier listening for deaf children, NDCS & UK Children's FM Working Group, 2017

**Contact:**

For further information, guidance or support, please contact [helpline@ndcs.org.uk](mailto:helpline@ndcs.org.uk)