Ear disease affecting Territory children

Imagine having your ears covered then trying to listen to sounds, learn new words and share stories with other people – this is what it can be like for children who suffer from ear disease (otitis media).

Otitis media and its associated hearing loss is a major public health problem in remote communities across the Northern Territory.

Head of Menzies Ear Health Research Program, Associate Professor Amanda Leach, said almost all babies in remote communities develop otitis media and in some communities up to 50 per cent of babies experience at least one episode of ear drum perforation, also known as ‘runny ears’, in the first 18 months of life.

Menzies School of Health Research is conducting a trial in Northern Territory communities to try and find the best vaccine and schedule for prevention of otitis media.

The Menzies team is working with community clinics to enrol babies in the trial from one month of age.

“The research nurses monitor the baby’s health, measure their height, weight and check their ears until they are seven months of age,” Associate Professor Leach said.

“Our research nurses also deliver all vaccines provided in the National Immunisation Program at two, four and six months of age,” she said.

Associate Professor Leach said ear disease is predominantly caused by pneumococcus and non-typeable \textit{H.influenzae} bacteria which colonise in the back of the nose then pass along the Eustachian tube to the middle ear space, behind the ear drum.

“These bacteria can get into the middle ear and cause an infection, like a boil, which can burst the ear drum and leads to the child having runny ears,” she said.

“Otitis media can cause hearing loss in babies as young as two weeks of age. The earlier the disease starts, the longer it persists – often throughout early childhood and school years.

“Difficulties with processing sound can lead to behavioural and learning problems, frustration and even depression in children,” Associate Professor Leach said.

Wurrumiyanga (previously known as Nguiu) on the Tiwi Islands is one of the communities involved in the trial.

Deputy Mayor of the Tiwi Islands Shire Council, Barry Puruntatameri said kids are missing out on a normal education as a result of the hearing loss caused by ear disease.

“The treatment is important for the future of the kids, that’s why we want Menzies to come out and work with the community,” Mr Puruntatameri said. “They are experts in this field.”

“We hope the trial will help prevent the next generations from being affected by the disease,” Mr Puruntatameri said.
According to Associate Professor Leach there are now two slightly different pneumococcal vaccines licensed in Australia.

“We believe that a combination of the two may offer maximum broad protection from more of the many types of bacteria that we know can cause otitis media in Indigenous babies,” she said.

“As a result of the trial, we are hoping to find out which vaccine, or maybe both vaccines, will be best for Indigenous babies and whether it is better to start giving vaccines earlier at one month of age,” Associate Professor Leach said.

The PREV-IX_COMBO trial is named after the PREVenar and SynflorIX vaccines and is funded by the National Health and Medical Research Council (NHMRC 605810) and will involve more than 400 babies from remote communities in the Northern Territory.

For more information about otitis media please go to [http://www.healthinfonet.ecu.edu.au/other-health-conditions/ear](http://www.healthinfonet.ecu.edu.au/other-health-conditions/ear)

**Media opportunity**

Head of the Menzies Ear Health Research Program, Associate Professor Amanda Leach, is available for interview about the trial and background regarding ear disease in the Northern Territory.

*Photo attached: Jenna Tipungwuti with her son George Tipungwuti, involved with the trial, and PREV-IX_COMBO trial coordinator, Menzies nurse Tracy Grierson preparing to conduct tympanometry and examine George’s ears.*

For media enquiries please contact Jenna Hoare on 0407 181 894.