



### Message from the Tonic Media Network Editorial Committee\*

Welcome to another edition of Practice Connect - a newsletter designed for you, your practice and your patients with up-to-date news and information.

### Kids' sports and their academic achievements

According to the Department of Health, more than 3.6 million children take part in sport each year. Sports, particularly team sports, are thought to teach a variety of life skills for kids: working with others to achieve a goal, perseverance, humility and communication. There's a strong culture of sport and physical activity in Australia - whether it's chasing the ball at lunchtime or kicking, hitting, or throwing one at the weekend. But is there a connection between sports involvement and academic achievement? That's what researchers from the University of Sydney set out to discover in a [recent study](#).

Researchers used data from the Longitudinal Study of Australian Children – which follows 10,000 children and their families, beginning in 2003 and has tracked the children into adulthood. It captures a range of data points, including health, physical activity, sport and educational outcomes. One cohort was analysed – about 4,200 kids who were followed from ages four-five to 20-21. Researchers looked at their sport participation, whether it was a team or individual sport (assessed by self-reporting), and educational outcomes such as school absenteeism, attention, working memory, school academic performance and university enrolment. The results were adjusted for factors such as sex, maternal education, socioeconomic status and remoteness.

Researchers found that continuing to participate in sport through a child's school years had several positive associations. Kids who played sport consistently performed better on memory and attention tasks and had higher numeracy and literacy scores, as well as lower absenteeism. Children weren't more likely to receive the Higher School Certificate if they played sports, but they did have higher academic performance overall and were also more likely to go on to university. There were slight differences in the results between individual and team sports, but broadly both trended towards having a positive effect on educational outcomes.

Of special note was that sporting activity helped kids in low socio-economic areas to do better in school, but fewer kids from these areas have access to sports. The authors suggest there's a double benefit from increasing participation in those areas, as well as more broadly across Australia, both to reduce physical inactivity and potentially boost levels of academic achievement.

## Further information

[Sport Participation for Academic Success: Evidence From the Longitudinal Study of Australian Children](#) Journal of Physical Activity and Health

### **High blood pressure is still our leading risk factor for premature death**

Like the rest of the world, cardiovascular disease (CVD) remains the leading cause of death in Australia, accounting for one in four deaths in 2019. According to the Heart Foundation around 120 people in Australia die from CVD each day, or one person every 12 minutes.

In a [recent review of the evidence](#), researchers from New South Wales looked at the risk factors contributing to death and disability in Australia, focusing on the impact of raised systolic blood pressure compared to other major risk factors.

Data from the Global Burden of Disease study (GBD), collected between 1990 and 2019, were analysed to determine the impact of various risk factors on all-cause and cardiovascular deaths and disability-adjusted life-years (DALYs). GBD uses a variety of data sources, including country census records, surveys, and health records to model the impact of various factors on health outcomes over decades.

Raised systolic blood pressure (SBP) emerged as the leading risk factor for premature deaths in Australia, consistently ranking at the top across the period studied. It was also the primary contributor to cardiovascular deaths and DALYs, particularly affecting stroke-related health outcomes. In 1990, elevated SBP was responsible for 24% of all deaths in Australia, or about 29,000 people. This figure declined to 14% (21,845 deaths) in 2010 and was the same again, 14% (25,498 deaths), in 2019 – but was still the number one contributor to death in these time periods despite the overall decline from 1990. Similarly, the contribution of high blood pressure to deaths specifically related to cardiovascular issues followed a similar pattern, with high blood pressure responsible for 54% of CVD deaths in 1990 and 44% in both 2010 and 2019.

The authors say there is an urgent need to refocus healthcare on blood pressure control. They argue that it's often seen as an "intermediate" factor which gets grouped with other health markers such as overweight or obesity to which lifestyle modifications (chiefly exercise and diet) are seen as the answer. They want to see more focus on blood pressure alone, both through raised awareness of high blood pressure as an issue (with many Australians unaware they have high blood pressure) and combination therapies in a single pill that make adherence easier.

## Further information

[The contribution of raised blood pressure to all-cause and cardiovascular deaths and disability-adjusted life-years \(DALYs\) in Australia: Analysis of global burden of disease study from 1990 to 2019](#): PLOS Journals

### **Understanding diagnostic delays in autism and ADHD**

ADHD and autism spectrum disorder are neurodevelopmental disorders affecting millions of children worldwide. It is estimated that 1 in 100 people in Australia are on the autism spectrum and around 1 in 30 adults has ADHD.

Both are commonly diagnosed in childhood, with ADHD typically identified between the ages of five to nine and autism between three and six years. Diagnosis is based on observing a child's behaviours and their developmental history, because there are no physical or biological tests for these disorders. Adding to the complexity is that each condition can present in various ways. Yet

timely diagnosis and intervention are crucial for improved outcomes in a child's social life, mental health and education.

A [recent study](#) focusing on Australian children sought to understand these diagnostic delays more comprehensively. The research involved caregivers of almost 700 children with ADHD, autism or both, aged between one and 16. Participants reported when developmental concerns were first detected in their child, when they received an autism or ADHD diagnosis, and who gave that diagnosis. Other demographic data, like socio-economic status, were also recorded.

The study found that most children received their diagnosis in a private setting (more than three quarters). The findings reveal the complex relationships between different developmental disorders – showing children with ADHD and autism received their ADHD diagnosis earlier than those children who just had ADHD, but that the delay for a diagnosis of autism was longer for those children diagnosed autism and ADHD, versus those diagnosed with autism alone. Girls were diagnosed later than boys for both autism and ADHD.

The longer diagnostic delays for children with multiple conditions occurring at the same time, and for young girls, suggests a need for improved education and training for healthcare professionals. GPs are often the first contact for concerned parents and play a crucial role in the referral process. The authors suggest guidelines for diagnosing ADHD and autism where they co-occur are lacking and point to a need for more specialised training and awareness.

#### Further information

[Age at diagnosis and diagnostic delay across attention-deficit hyperactivity and autism spectrums](#): Sage Journals

### **Extreme heat linked to preterm birth**

Preterm birth is a major global health issue that can lead to infant mortality and long-term health complications. In Australia more than 26,000 Australian babies are born preterm each year and 15 million babies globally.

Defined as a birth occurring before 37 weeks, premature birth poses challenges for healthcare systems and families. With global warming leading to more extreme heat events, understanding their impact on preterm birth is crucial. A [new study](#) led by Monash University researchers examined the association between heat exposure during pregnancy and preterm birth, considering the potential mitigating role of “greenness,” including tree cover and green spaces.

The cohort study analysed birth data from mothers in Sydney, collected as part of the New South Wales Midwives Data Collection (2000-2020), which included more than 60,000 pre-term births over that period. It focused on pregnant mothers' exposure to extreme heat and greenness during each trimester. The researchers assessed heat exposure using meteorological data to determine patterns of exposure to certain temperatures over time, while greenness was measured by combining measures such as known vegetation in an area and tree cover data, plus the level of “urbanisation” in a given region (or how built up the area was).

The study found a significant association between exposure to extreme heat in the third trimester and increased odds of preterm birth. That meant women who were exposed to extreme temperatures in their third trimester were at a higher risk of preterm birth. Exposure to extreme temperatures in a mother's first or second trimester did not have the same effect. Researchers also found that the presence of greenness in residential areas had some moderating effect on this association – that is, higher levels of greenness were linked to a reduced risk of preterm birth even when mothers were exposed to extreme heat.

These findings highlight an unusual association – extreme heat and premature birth – and underline the important role of urban planning and public health interventions in mitigating preterm birth risks. The authors suggest that improving strategies to increase green spaces in urban areas could be a significant step towards reducing these impacts of heat on pregnancy outcomes. It's also another factor clinicians may look to if they have patients who already have risk factors for preterm birth and who have a third trimester that could fall in a period of extreme heat.

#### Further information

[Heat Exposure, Preterm Birth, and the Role of Greenness in Australia](#): National Center for Biotechnology Information

#### **Is your practice ready for flu season?**

It's important that General Practices are prepared for flu season. This includes developing strategies for managing vaccine distribution, appointment scheduling and billing procedures efficiently.

Leading Practice Intelligence Platform provider Cubiko outlines the steps you can take to help ensure that your practice is prepared. By embracing a structured workflow, practices can streamline operations, increase vaccination coverage and safeguard public health during flu season.

<https://www.cubiko.com.au/resources/2024-flu-clinic-workflow/>

#### Further information

How Cubiko helps you deliver the flu vaccine

<https://www.cubiko.com.au/blog/how-cubiko-helps-you-deliver-the-flu-vaccines/>

Prevention Strategies for Seasonal Influenza in Healthcare Settings

<https://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>

#### **Why everyone isn't getting the new RSV vaccine**

In recent years respiratory syncytial virus (RSV) cases have exploded in Australia. At the time of writing, there have been 24,211 notifications of laboratory confirmed RSV reported to the National Notifiable Diseases Surveillance System this year.

A new vaccine Arexvy has been approved by the TGA through private prescription for patients aged 60 and over. The protein-based vaccine contains an antigen component and an adjuvant system and is given as a single dose intramuscularly.

Arexvy is designed to help protect people from serious illness and reduce hospitalisations, especially the vulnerable. However, not everyone is getting it. Arexvy costs up to \$350 per dose and seen as unaffordable for some patients.

Arexvy has already been approved for use in the UK, the European Union, the US, Canada and Japan. In recent days, the TGA has also approved an RSV vaccine (ABRYSVO) for pregnant women which protects their baby once born. Again, PBS subsidy is not yet available.

## Free RSV immunisations for infants

In related news, a free RSV immunisation (nirsevimab) is available in Western Australia for babies aged under eight months, or up to 19 months for those at increased risk of severe RSV. It's not actually a vaccine. It's a synthetic antibody which mimics the real antibodies produced against RSV.

In NSW nirsevimab will be initially offered to hospitalised premature infants (less than 37 weeks gestation at birth) born after October 31, 2023, and all Aboriginal and Torres Strait Islander infants born after October 31, 2023 in NSW. It will then be expanded to other high-risk infants under the program.

In Queensland nirsevimab, the following infants and young children will be eligible for RSV immunisation:

- All newborn infants
  - This will be offered as a dose at birth or prior to discharge from hospital.
  - Infants born on or after the program commencement date who are not immunised in hospital, can access this dose up until they are less than 8 months of age.
- Aboriginal and Torres Strait Islander infants less than 8 months of age.
- Infants with certain complex medical conditions less than 8 months of age.
- Infants with certain complex medical conditions from 8 months up to 19 months of age (inclusive), until 31 October 2024.

## What are the symptoms of RSV?

Most cases of illness caused by RSV are mild, but it can lead to serious illness for young children, the elderly and people who are immunosuppressed.

RSV can lead to bronchiolitis and pneumonia. It can also cause ear infections and the coughing associated with the illness can worsen asthma symptoms.

According to NSW Health the symptoms usually begin around 5 days after exposure to the virus and can get worse over the first 3 to 4 days of the illness before an improvement. Symptoms can include:

- runny nose
- cough
- sneezing
- fever
- ear infection (less common)
- RSV can also cause wheezing and difficulty breathing.

## Further information

[Respiratory syncytial virus \(RSV\)](#): NSW Health

[Respiratory syncytial virus \(RSV\)](#): Lung Foundation Australia

## **Don't believe the headlines, Long-COVID is real.**

Queensland Health research about COVID has been in the news lately. Due to be presented at the European Congress of Clinical Microbiology and Infectious Diseases in Barcelona in late April, the research found that a year after infection there was no evidence of worst post-viral symptoms if infected by COVID-19 when compared with influenza or other respiratory illnesses.

It's an area of research that is contested, with different definitions of what long-COVID is and different ways data is collected.

Queensland's Chief Health Officer, Dr John Gerrard says the term "long-COVID" should be scrapped, saying its use implies there's something unique about longer term symptoms associated with COVID infection.

Dr Norman Swan has provided a critical analysis of the Queensland research suggesting it has major problems. You can find that here:

<https://www.abc.net.au/listen/programs/healthreport/why-it-might-be-too-early-to-stop-saying-long-covid/103591916>

### Further information

The following sources have a contrary view on the issue of long-COVID

- [Study shows long COVID worse for patients than 'long flu'](#)
- [Long-term outcomes following hospital admission for COVID-19 versus seasonal influenza: a cohort study](#)

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