



# Attention Deficit Hyperactivity Disorder



## What is attention deficit hyperactivity disorder?

Attention deficit hyperactive disorder (ADHD) is a neurodevelopmental disorder. It is a condition of the brain that makes it hard for children to maintain their focus, control their impulsive behaviours, and they tend to be overly active. Thus, this affects their daily and school functioning. Children with ADHD will benefit from therapy and medical treatment.

The incidence rate is estimated to be 2-7% of school-aged children in largescale Japanese and American studies respectively. In Singapore, it is estimated to be 3-5% of school-going children.

## What are the causes of ADHD?

The exact causes of ADHD are not fully understood. Genes, premature delivery, low birth weight, exposure to environmental toxins such as lead, and alcohol and tobacco use during pregnancy are considered as potential risk factors. Many studies suggest that genes play a large role, though the way ADHD is inherited is likely to be complex.



## What are the symptoms of ADHD?

A child with ADHD may have one or more of the following behaviours:

### + Inattention

- Often fails to give close attention to details or makes careless mistakes in schoolwork
- Often has difficulty concentrating or sustaining attention
- Often loses things necessary for task or activities
- Often easily distracted by surroundings
- Often does not follow through on instructions and fails to finish schoolwork/task.
- Often forgetful in daily activities (e.g. doing chores, running errands)

### + Hyperactivity and Impulsivity

- Often fidgets or squirms in seat
- Often leaves seat in situations when expected to remain seated
- Often runs about or climbs in situations where it is inappropriate
- Often talks excessively
- Often unable to wait his or her turn
- Often interrupts others
- Often restless



It is also important to exclude the possibility that the child's hyperactivity is due to other factors such as excessive screen use, sleep problems, learning difficulties, social issues, anxiety or other mood disorders.

In addition, most young children have limited attention span and some need more time to develop school readiness skills. Hence, the diagnosis is usually made only when a child is older than 6 years of age although symptoms may occur earlier.

There is no single diagnostic test for ADHD. A diagnosis can only be made after information is collected from the parents, other caregivers, the child (if appropriate), the child's teacher and a recommended school observation. The information is usually gathered with the help of a standardised questionnaire and/or interview which the parent and teacher are asked to complete.

A diagnosis can be made by an experienced paediatrician, a child psychologist or child psychiatrist.



## For an ADHD diagnosis, the symptoms of inattention and/or hyperactivity should:

- Be present before 12 years old
- Be present in two or more settings, such as at home and in school
- Interfere with or reduce the quality of social, school or work functioning
- Not be attributed to other mental disorders



## NUH Child Development Unit

NUH Child Development Unit is part of the Khoo Teck Puat – National University Children's Medical Institute at National University Hospital. The clinic provides multidisciplinary assessments, therapy and holistic management of children with developmental & behavioural disorders from birth to 7 years old. Please make an appointment if you would like to see our paediatricians.

For health information and resources relating to child development, visit:

<https://www.nuh.com.sg/cdu-resources>

<https://www.nuh.com.sg/cdu>



# Notes

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## About the National University Centre for Women and Children

National University Centre for Women and Children (NUWoC) is a national university specialist centre that aims to empower women, children and their families to lead healthier lives. We provide comprehensive medical and surgical services ranging from pre-conception to child and maternal health.

NUWoC comprises the Department of Obstetrics & Gynaecology (O&G) and Khoo Teck Puat – National University Children's Medical Institute (KTP-NUCMI) of National University Hospital. It focuses on the right-siting of appropriate services in the community and builds complementary services in National University Health System's (NUHS) centres of excellence – Ng Teng Fong General Hospital and Alexandra Hospital.

Through a generous gift from the Estate of Khoo Teck Puat, KTP-NUCMI established an integrated outpatient facility with medical, diagnostic and rehabilitation services for children. We are also the only public specialist centre in Singapore that offers paediatric kidney and liver transplant programmes.

For more information about us, visit [www.nuh.com.sg/NUWoC](http://www.nuh.com.sg/NUWoC)

### Children's Emergency (24-hr)

Location NUH Main Building, Zone F, Level 1  
Contact +65 6772 5000

### KTP-NUCMI

Location NUH Main Building, Zone E, Level 2  
(Accessible via Kent Ridge Wing, Zone C, Level 2, Lift Lobby C)  
Operating Hours 8.30am – 5.30pm (Mon to Fri), 8.30am – 12.30pm (Sat)  
General Enquiry +65 6772 5736  
Appointment Line +65 6908 2222  
Email [ktpnucmi\\_appt@nuhs.edu.sg](mailto:ktpnucmi_appt@nuhs.edu.sg)

### 9a Viva-University Children's Cancer Centre

Location NUH Medical Centre, Zone B, Level 9  
Operating Hours 8am – 5.30pm (Mon to Fri)  
Appointment Line +65 6772 5030  
Email [cbccappt@nuhs.edu.sg](mailto:cbccappt@nuhs.edu.sg)

### NUH Children's Urgent Care Clinic @ Bukit Panjang

Location Junction 10, #01-22  
Operating Hours 9am – 11pm daily (including public holidays)  
General Enquiry +65 6219 1538  
Email [childreucc@nuhs.edu.sg](mailto:childreucc@nuhs.edu.sg)

### NUH Child Development Unit @ JMC

Location Jurong Medical Centre, Level 2  
Operating Hours 8.30am – 5.30pm (Mon to Fri)  
Appointment Line +65 6665 2530 / 2531  
Email [cdu@nuhs.edu.sg](mailto:cdu@nuhs.edu.sg)

### NUH Child Development Unit @ Keat Hong

Location Keat Hong Community Club, #03-01  
Operating Hours 8.30am – 5.30pm (Mon to Fri)  
Appointment Line +65 6769 4537/4637  
Email [cdu@nuhs.edu.sg](mailto:cdu@nuhs.edu.sg)

### Clinic A22 NUWoC Children's Clinic @ NTFGH

Location Ng Teng Fong General Hospital  
Tower A – NTFGH Clinics, Level 2  
Operating Hours 8.30am – 5.30pm (Mon to Fri)  
Appointment Line +65 6908 2222  
Email [appointment@nuhs.edu.sg](mailto:appointment@nuhs.edu.sg)

## Our Patient Care Institutions

National University Hospital  
Ng Teng Fong General Hospital &  
Jurong Community Hospital  
Alexandra Hospital  
National University Polyclinics  
Jurong Medical Centre  
National University Cancer Institute, Singapore  
National University Heart Centre, Singapore  
National University Centre for Oral Health, Singapore  
NUHS Diagnostics  
NUHS Pharmacy



Scan the QR code for more information on our patient care institutions.



Scan QR code for more information on NUWoC facilities.

OneNUHS Hotline: (65) 6908 2222

OneNUHS General Enquiries: [contactus@nuhs.edu.sg](mailto:contactus@nuhs.edu.sg)

OneNUHS Appointments: [appointment@nuhs.edu.sg](mailto:appointment@nuhs.edu.sg)

[www.nuhs.edu.sg](http://www.nuhs.edu.sg)

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