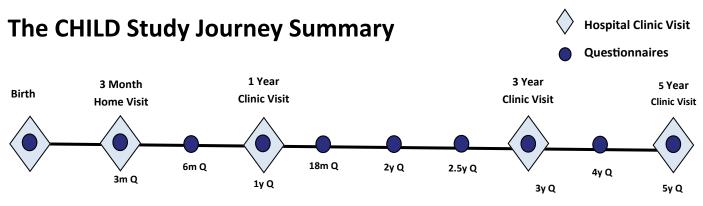


Congratulations and thank you!

This is an extremely exciting time in the study. Not only have all of our children turned 1 year of age, but we are now happy to see familiar faces returning to the Hospital for Sick Children to complete both the 3 year and the ***New* 5 year clinic visits**. What a pleasure it is to see the lovely families you have, and the little children your once newborn babies are growing up to be. By returning to each study visit and by completing each successive questionnaire, you are enabling us to track and analyze your child's development over time and to determine what factors promote healthy childhood development.

Toronto CHILD Study Stats

- 764 Active Toronto participants
- 766 Home visits completed
- 695 1 year visits completed
- **287** 3 year visits completed
- 20 5 year visits completed



3 year and 5 year olds ...

Welcome Back to the CHILD Study Clinic Visit!

We want you to be comfortable!

Our top priority is ensuring that you are comfortable. All tests are voluntary. Always let our staff know of any questions, concerns, and what tests you feel comfortable participating in.

| | 3 Year Clinic | 5 Year Clinic |
|---------------------|---------------|---------------|
| Clinical Assessment | ✓ | \checkmark |
| Measurements | ✓ | ✓ |
| Breathing Tests | ✓ | ✓ |
| Allergy Skin Test | \checkmark | \checkmark |
| Ventolin | | \checkmark |
| Blood Sample | | ✓ |
| Urine Sample | \checkmark | ✓ |





WHEN and HOW will you be contacted to book a clinic visit?

A CHILD Study team member will contact you by telephone and by email to book your child's appointment the month of their 3rd and/or 5th birthday. Has your contact information changed? Please let us know at <u>child.study@sickkids.ca</u> or by telephone at 416-813-7765.

Clinic Visit Reimbursements

Reimbursements will be provided for any amount of clinic participation. To thank you for attending the CHILD Study clinic visit, a TTC and/or parking reimbursement will be provided along with a \$100 gift card from either President's Choice or Shoppers Drug Mart.

What do we learn from your CHILD Study clinic visit?

Measurements such as height, weight, head, mid-arm, waist, and hip circumference, blood pressure and oxygenation, will provide knowledge of what is a normal value for healthy children of a certain age.

Breathing tests allow us to track your child's lung function over time and will provide knowledge of what are normal lung function values for healthy children of a certain age.

Allergy skin testing will allow us to track your child's allergen sensitivities over time.

Collectively, the **breathing tests**, **allergy skin test** along with health, environmental exposure and timing data from **questionnaires**, and genetic and immune system information from urine, blood, and saliva **samples**, will help us to determine genetic and environmental factors that influence the development of allergy and asthma.

Oh those QUESTIONNAIRES...

1y, 18m, 2y, 2.5y, 3y, 4y, 5y Questionnaires

All those questions!!! We would like to express our sincerest gratitude to all families for your continued participation and completion of all online questionnaires. Questionnaire completion is our key to determining what environmental factors are protective and promote healthy childhood development. Questionnaires also let us know the time of exposure to determine what time points in development are more sensitive and critical to long term health and the development of asthma and allergies.



We are flexible and are here to support your success!

Please let CHILD Study staff know if you prefer paper questionnaires, have problems with online questionnaires, require your validation code or password, or need to make a correction to your entries.

Are you approaching one of the above questionnaire completion time points?

Please log online to complete them.

We'd love to hear from you!

Feel free to contact us by telephone, 416-813-7765 or by email, child.study@sickkids.ca. Our office is open Monday-Friday 8am to 4pm.



What are we doing with all those samples?

Investigators, staff and students are actively analysing biological and environmental samples. To date, we have released over 13,000 samples for analysis:

Urine Samples collected from children at 3 months, 1 year, 1.5 years, and 3 years of age are being analysed for levels of cotinine which indicates exposure to smoking and for levels of phthalates which indicates exposure to chemicals in household items such as cleaners, personal hygiene products, and plastics.

Dust Samples collected at the 3 month home visits are being analysed for the presence of household mold, allergens, and chemicals found in outdoor air pollution.

Mother and Child Blood Samples collected at birth (cord blood) and 1 year of age are being examined how the mother's diet during pregnancy and your child's diet during the first year of life may affect your child's genes. These genetic effects are being linked with physical clinical observations like wheezing, allergies, and obesity. In addition, blood samples are being used to look at the status of your child's immune system.

Stool Samples collected at 3 months and 1 year of age are being analysed to explore any linkages between mode of delivery (vaginal vs. C-section), breastfeeding, family and maternal stress, with the levels of different types of stool bacteria, which may impact the development of the immune system.



Toronto CHILD Study team presents CHILD Study data at the May 2014 American Thoracic Society Conference, California

Multiple Breath Washout (MBW) breathing test result, lung clearance index (LCI), was compared for healthy children and children with asthma. MBW data collected from the CHILD Study 3 month, 1 year, 18 month and 3 year clinic visits were used. Analysis revealed that healthy children had a significantly different LCI than children with asthma. This research reveals the potential of MBW to be used to help identify asthma.

Lung clearance index (LCI) values were also used in a study that investigated the potential of LCI to determine whether a wheeze was caused by asthma or a virus.

Tidal breathing volumes, the volume of air inhaled and exhaled at rest, measured in infants may be an early predictor of respiratory disease. Data collected from the CHILD Study infant pulmonary function tests at birth, 3 months, 12 months, and 18 months were used to investigate this hypothesis.



Congratulations Dr. Subbarao

Co-Director of the CHILD Study and the Toronto CHILD Principal Investigator We are pleased to announce that Dr. Subbarao is the 8th recipient of the "Breathe New Life Award" for her study entitled "Development of Novel Clinical Tests to Diagnose and Monitor Asthma in Preschool Children". Toronto CHILD Study children have participated and contributed data towards Dr. Subbarao's preschool lung function tests such as multiple breath washout and spirometry.



Extra, Extra, Read all about it...

The CHILD Study in the News!

| November 03, 2015 | http://allergen-nce.ca/child-study-video-in-cihr-competition/ |
|------------------------|--|
| | The CHILD Study whiteboard video was one of 13 entrants in the 2015 CIHR- "IHDCYH Talks" Video Competition. For the |
| | month of November, the public had access to watch and vote on their favourite videos. Give the video a watch and keep |
| | your ears tuned for the winners, which will be announced early 2016! |
| September 30, 2015 | http://www.thestar.com/news/world/2015/09/30/canadian-study-identifies-critical-window-for-developing-asthma.html |
| - | Toronto Star published an article entitled "Canadian study identifies 'critical window' for developing asthma". Dr. Turvey |
| | discusses how stool samples from CHILD study participants reveal that there are four specific bacteria that may have life- |
| | long consequences in the development of asthma later on. |
| November 09, 2015 | http://medicalxpress.com/news/2015-11-antibiotics-delivery-affects-infant-aut.html |
| · · · · · , · · | Dr. Kozyrskyj, senior author of the CHILD Study, discusses her research that looks into the effect that receiving antiobiotics |
| | during delivery has on the infant's intestinal bacteria, which can affect their immune systems. |

The Vancouver Sun published an article entitled "Vancouver tops four Canadian+cities+child+allergies+study+finas/11026786/story.html where Dr. Brauer discusses his publication in the journal Environmental Health Perspectives. Tests concluded that children who came into contact with more microorganisms were less likely to develop allergies.

March 10, 2015http://www.winnipegfreepress.com/our-communities/souwester/forum/Local-doctors-work-has-big-benefits 295783421.html The Winnipeg Free Press published an article entitled "Local doctors' work has big benefits" that highlights how Dr. Azad's research within the CHILD study was show cased at a meeting between previous Prime Minister Stephen Harper and Bill Gates to discuss the strong leadership that Canada has demonstrated in promotion maternal, newborn, and child health.

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your pa and de of this possibl

We want to hear from you!

Have you changed your address, telephone number, or email? Do you have any questions regarding booking, questionnaire completion, or general inquiries? Please feel free to contact your Toronto CHILD Study team by telephone, 416-813-7765 or by email, child.study@sickkids.ca. We are always happy to help. We can be reached Monday-Friday 8am to 4pm.