

Suzanne Tough, BSc, MSc, PhD

Professor, Departments of Paediatrics and Community Health Sciences
AI-HS Health Scholar



RESEARCH INTERESTS AND ACTIVITIES

Key Words: premature birth, infant/low birth weight, prenatal care, maternal welfare, child development, parenting, reproductive behaviour, assisted reproductive techniques, fetal alcohol spectrum disorder

Dr. Tough's research program focuses on improving the health and well-being of women during pregnancy to achieve optimal maternal, birth and early childhood outcomes. She currently leads an interdisciplinary team of researchers (Preterm Birth and Healthy Outcomes Team), funded by Alberta Innovates – Health Solutions, that is learning more about preventing preterm birth and supporting healthy birth outcomes by looking at the genetic, molecular, clinical, community and population health factors that contribute to preterm birth. She is also involved in research projects related to prenatal care, maternal mental health, and child development. The underlying aim of her research program is to optimize birth and childhood outcomes by creating evidence that informs the development of community and clinical programs and influences policy.

RESEARCH IN PROGRESS

<u>ROLE</u>	<u>FUNDING AGENCY</u>	<u>TITLE OF PROJECT</u>	<u>2010/11 ALLOCATION</u>
Director	Alberta Innovates - Health Solutions	<i>Preterm birth and healthy outcomes team (PreHOT)</i>	440,873
Principal Investigator	Alberta Children's Hospital Foundation	<i>All our babies cohort: Understanding development</i>	50,000
	Women and Children's Health Research Institute	<i>Examining the effects of breastfeeding difficulties on postpartum depression: Healthy mothers, healthy families</i>	ongoing
	Upstart (formerly Calgary Children's Initiative), United Way of Calgary and Area	<i>Community perinatal care follow up study (age 8): It's all about me</i>	ongoing
	Alberta Centre for Child, Family and Community Research	<i>Can telephone support in the prenatal period influence maternal well being into the post partum? Development of a team</i>	ongoing
	Alberta Centre for Child, Family and Community Research	<i>Compiling the evidence to inform a future follow-up of the CPC longitudinal cohort in pre-adolescence: Creation of a data repository and synthesizing the literature</i>	10,000
Co-Principal Investigator	Canadian Institutes of Health Research	<i>Development of a conception cohort to study the utilization of prenatal screening</i>	ongoing

<u>ROLE</u>	<u>FUNDING AGENCY</u>	<u>TITLE OF PROJECT</u>	<u>2010/11 ALLOCATION</u>
Co-Principal Investigator	Calgary Laboratory Services	<i>Development of a conception cohort to study the utilization of prenatal screening</i>	ongoing
Co-Investigator	Canadian Institutes of Health Research	<i>Quality of prenatal care questionnaire: Instrument development and testing</i>	ongoing
	Max Bell Foundation	<i>CUPS One World Child Development Centre: Effects of a multiple intervention preschool program on 7- and 10-year-old children and their caregivers</i>	28,348
	Alberta Heritage Foundation for Medical Research; Health Research Fund	<i>Clinical outcomes and resources utilization of near term and term neonates residing in Alberta</i>	ongoing
	Canadian Institutes of Health Research	<i>Neurobehavioural outcomes of children with prenatal alcohol exposure and fetal alcohol spectrum disorder</i>	ongoing
	Canadian Institutes of Health Research	<i>Knowledge Translation Canada: Strategic training initiative in health research</i>	296,438
	Alberta Children's Hospital Foundation	<i>National child health training centre for knowledge translation</i>	38,936

PUBLICATIONS

Chapter in Book

Tough SC, Jack M. Frequency of FASD in Canada and what this means for prevention efforts. In: *Fetal Alcohol Spectrum Disorder – A Policy Perspective*, Riley EP, Clarren S, Weinberg J, Jonsson E (eds). Wiley/Blackwell, Weinheim, 2010:27-44.

Peer-Reviewed Journal Articles

Fenton TR, **Tough SC**, Lyon AW, Eliasziw M, Hanley DA. Causal assessment of dietary acid load and bone disease: A systematic review and meta-analysis applying Hill's epidemiologic criteria for causality. *Nutrition Journal* 2011;10:41.

Roberts E, Metcalfe A, Jack M, **Tough SC**. Factors that influence the childbearing intentions of Canadian men. *Human Reproduction* 2011;26(5):1202–8.

Gracie S, Metcalfe A, Dolan SM, Kehler H, Siever J, **Tough SC**. Utilization of the H1N1 and seasonal flu vaccines by pregnant women during a pandemic flu season. *Journal of Obstetrics and Gynaecology Canada* 2011;33(2):127-33.

Gracie SK, Lyon AW, Kehler HL, Pennell CE, Dolan SM, McNeil DA, Siever JE, McDonald SW, Bocking AD, Lye SJ, Hegadoren KM, Olson DM, **Tough SC**. All our babies cohort study: Recruitment of a cohort to predict women at risk of preterm birth through the examination of gene expression profiles and the environment. *BMC Pregnancy and Childbirth* 2010;10:87.

Tough SC. Dispelling myths and developing a framework for reducing the risk of alcohol-exposed pregnancies. *Forum on Public Policy Online: Journal of the Oxford Round Table* 2010;2010(1).

Tough SC, Siever JE, Jack M. Reproductive assistance, emotional health, obesity, and time to pregnancy among women under 35 years of age. *Journal of Obstetrics and Gynaecology Canada* 2010;32(12):1153-62.

Abstracts Published in Journals

Heaman M, Sword W, Akhtar-Danesh N, Bradford A, **Tough SC**, Janssen P, Young D, Kingston D, Helewa M, Hutton E. Development and testing of the Quality of Prenatal Care Questionnaire. Conference proceedings from the *Society for Pediatric and Perinatal Epidemiologic Research (SPER) 24th Annual Meeting*, Montreal, QC, June 20-21, 2011;B80:197.

Collisson BA, McDonald SW, **Tough SC**. Factors contributing to the uptake of routine pediatric vaccinations among infants. *American Journal of Epidemiology* 2011;173(Suppl 11):S101.

Chaput K, Kehler H, McDonald S, **Tough SC**. Limited prenatal care and increased risk of poor breastfeeding outcomes. *American Journal of Epidemiology* 2011;173(Suppl 11):S134.

Alton M, **Tough SC**, Mandhane P, Kozyrskyj A. Postpartum depression, an independent risk factor for wheeze in pre-school girls. *American Journal of Epidemiology* 2011;173(Suppl 11):S143.

McDonald S, Wall J, Forbes K, Kehler H, **Tough SC**. Prenatal screening for suboptimal mental health in the postpartum period. *American Journal of Epidemiology* 2011;173(Suppl 11):S151.

Metcalf A, Forbes K, Gracie S, **Tough SC**. The relationship between preconceptional and prenatal advice on gestational weight gain. *American Journal of Epidemiology* 2011;173(Suppl 11):S295.

Tough SC, Jack M, Newburn-Cook C. Do factors that influence pregnancy planning differ by maternal age? A population based survey. *Annals of Epidemiology* 2010;20(9):723.

Roy A, Thurston WE, **Tough SC**, Patten SB, Crowshoe L. Measuring oppression and other determinants of depression among pregnant Aboriginal women in the Calgary area: Study design. *Clinical and Investigative Medicine* 2010;33(4S):16.

GRADUATE STUDENT SUPERVISION

Carol Weller, MSc student, Department of Community Health Sciences

Thesis Topic: Mental health characteristics and patterns of health care utilization in pregnant and early postnatal women

Amy Metcalfe, PhD student, Department of Community Health Sciences

Thesis Topic: The impact of prenatal screening on future resource utilization in pregnancy

Kathleen Chaput, PhD student, Department of Community Health Sciences

Thesis Topic: The effects of difficulties with breastfeeding and associated breastfeeding support services on postpartum mental health

Tharsiya Nagulesapillai, MSc student, Department of Community Health Sciences

Thesis Topic: Factors associated with breastfeeding practices among new Canadian mothers

UNDERGRADUATE STUDENT SUPERVISION

Brittany Staddon, BHSc student, Biomedical Sciences

Project Topic: Socioeconomic status and breastfeeding in a longitudinal community study: Implications for public health policy

POSTDOCTORAL RESEARCH FELLOWS

Beverly Collisson, Postdoctoral Fellow, Department of Paediatrics

Research Topic: Language and cognitive development in 12 month olds

Sheila McDonald, Postdoctoral Fellow, Department of Paediatrics

Research Topic: Maternal and child well-being in two cohorts (the Community Perinatal Care Cohort and the All Our Babies Cohort)

Lesley Wiart, Postdoctoral Fellow, Faculty of Nursing, University of Alberta (Co-Supervisor)

Research Topic: Inclusive childcare: Description of effective service delivery models for children with special needs requiring child care