



Learning Early to Prevent Heart Disease

Heart Niagara worked with Niagara Region elementary and secondary teachers to teach over 5,500 students healthy choices and preventing heart disease as they grow up. The Healthy Heart Schools' Program also engages the student's families and health care providers in the discussions about healthy choices and health care management of health issues identified. Students from grade 5, grade 7 and grade 9 participated in the Healthy Heart Schools' Program.

Grade 5

In Grade 5 a pilot project was launched to work with the teachers, students and parents at an earlier age and assess their readiness to participate in the Healthy Heart Schools' Program. The Grade 5 pilot was a great success with over 140 families involved. The preliminary results will be reported on by Dr. Brian McCrindle at a meeting with the school boards on October 7th, 2011.

Grade 7

2010- 2011 marked the seventh school year for the Grade 7 component of the Healthy Heart Schools' Program. In grade seven 1,488 students completed a family history questionnaire and participated in CPR/AED Training.

Grade 9

The Grade 9 component of the Healthy Heart Schools' Program has been in continuous operation since 1987. In the 2010-2011 school year over 4,000 students participated regionally. Of the students assessed over 10% were referred to their family doctor or nurse practitioner, 5% for high cholesterol, 8% for obesity, 4% for positive family history and 0.1% for high blood pressure.

Research

Researchers presented their research based on the Healthy Heart Schools' Program data with posters and oral presentations at the 2010 Canadian Cardiovascular Congress and the 2nd Annual National Obesity Summit. Publications made possible by Heart Niagara data are outlined on the back page.

Heart Niagara continues to need your support.

The Healthy Heart Schools' Program is made possible by the partnerships Heart Niagara has with the school boards in Niagara, community and corporate donations, nurse practitioner funding from the Ministry of Health and by research funding from the Cardiovascular Clinical Research Unit - The Hospital for Sick Children.





Assessment Results Grade Five (5) 2010/11 Data Summary

Total enrollment (pilot)	220					
Total participation (questionnaires handed in)	141				64.1%	of enrollment
Total assessed in class	136				96.5%	of participants
Student absent, forms collected	5				3.7%	of participants
Assessed - Total Cholesterol and HDL	113		Min.	Max.	83.1%	of total assessed
Outside of cut-point TC >4.4 mmol/L	14	Range	2.58	5.15	12.4%	of assessed for cholesterol
Outside of cut-point HDL < 1.05 mmol/L	38	Range	0.4	1.98	33.6%	of assessed for cholesterol
Outside of cut-point non-HDL > 3.1 mmol/L	20	Range	1.45	4.19	17.7%	of assessed for cholesterol
Assessed - Systolic BP	134	Range	69	129	98.5%	of total assessed
Outside of cut-point - Systolic BP >90%ile	3				2.2%	of assessed for Systolic BP
Assessed - BMI	136	Range	13.7	38.1	100.0%	of total assessed
Assessed - Waist Circumference in cm (WC)	136	Range	52.3	104.8	100.0%	of total assessed
Outside of cut-point - BMI > 85%ile	43				31.6%	of assessed for BMI
Outside of cut-point - WC/ht ratio > 0.5	29				21.3%	of assessed for WC and Ht
Assess - tobacco use	119					of total assessed
Family members smoking	46				38.7%	of assessed for tobacco use
Currently smoking tobacco	0				0.0%	of assessed for tobacco use
Assessed - Family History of premature cardiovascular disease (Hx)	132				93.6%	of participants (includes forms from absent students)
Outside of cut-point - Family Hx Positive for parent or grandparent	50				37.9%	of participants
Health Care Provider Letters*	121				85.8%	of total assessed
Parent Letters*	135				95.7%	of total assessed
HNI Nurse Practitioner Letter*	20				14.2%	of total assessed

* All families and their health care providers received letters (if contact information was provided) with the students' assessment results.

CPR/AED Training Results Grade Seven (7) 2010/11 Data Summary

Total enrollment	1,716					
Students with completed form on Family History of premature cardiovascular disease	1,488				87%	of enrollment
Students Trained in CPR/AED	1,488				87%	of enrollment

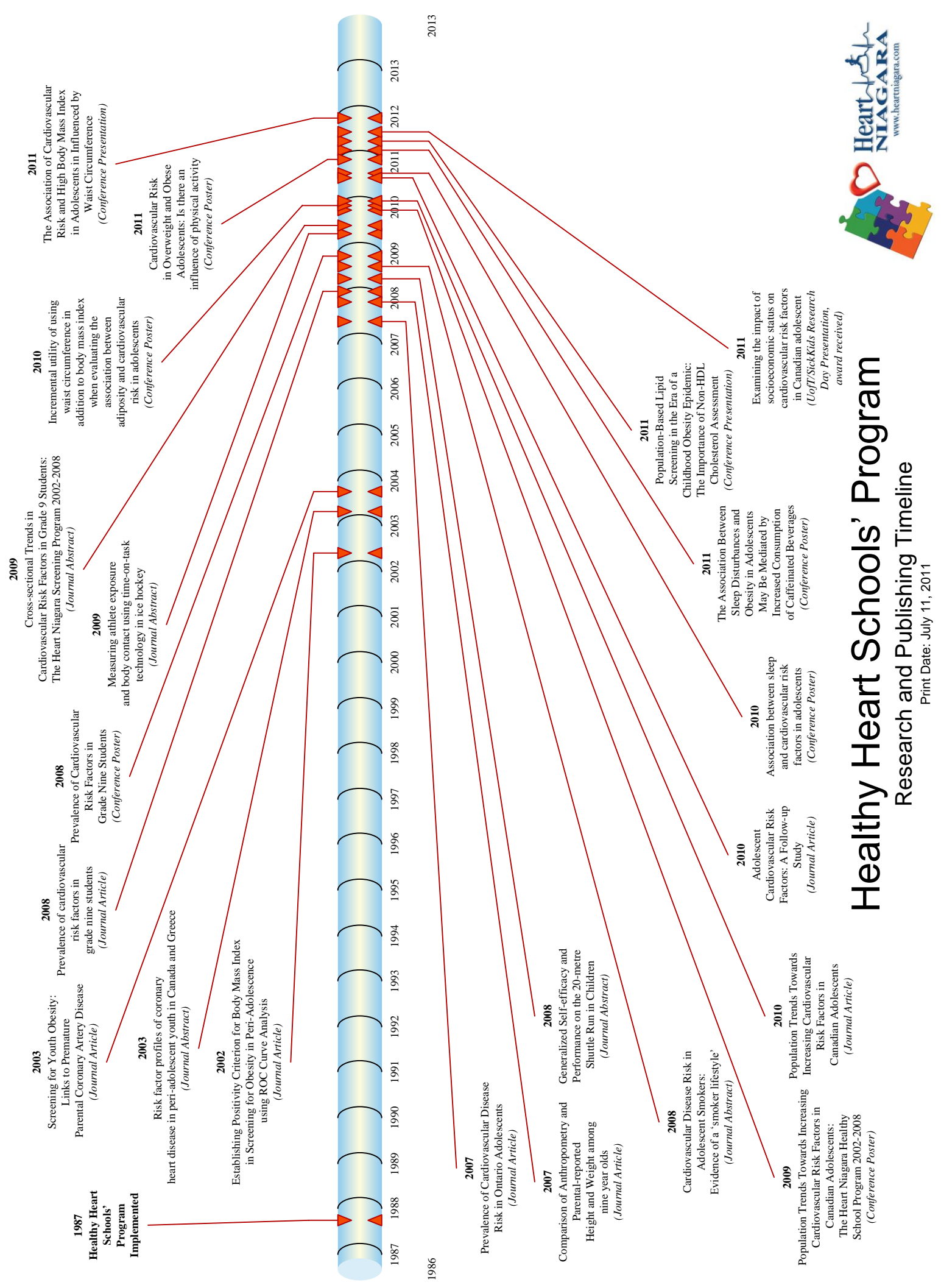


Assessment Results Grade Nine (9) 2010/11 Data Summary

Total enrollment (3 semesters: summer, first and second)	4,636					
Total participation (questionnaires handed in)	3,891				83.9%	of enrollment
Total assessed in class	3,732				95.9%	of participants
Student absent, forms collected	173				4.6%	of participants
Students Trained in CPR	4,014				86.6%	of booked
Assessed - Total Cholesterol and HDL	3,121		Min.	Max.	83.6%	of total assessed
Referred - HDL / non-HDL ratio < 0.22	153	Range	0.07	2.85	4.9%	of assessed for cholesterol
Assessed - Systolic BP	3,715	Range	71	143	99.5%	of total assessed
Referred - Systolic BP ≥95%ile	3				0.1%	of assessed for Systolic BP (average of 6 BPs)
Not Referred - SBP ≥90%ile to <95%ile	99				2.7%	of assessed for SBP
Assessed - BMI	3,728	Range	13	47	99.9%	of total assessed
Assessed - Waist Circumference (WC)	3,730	Range	51.6	126	99.9%	of total assessed
Referred - BMI ≥95%ile + WC >95%ile	314				8.4%	of assessed for BMI and WC
Assess - tobacco use	3,723					of total assessed
Currently smoking tobacco	73				2.0%	of assessed for tobacco use
Assessed - Family History of premature cardiovascular disease (Hx)	3,891				100.0%	of participants (includes forms from absent students)
Referred - Family Hx Positive for parent or sibling	179				4.6%	of participants
Referred - Family Doctor*	498				13.3%	of total assessed
Referred - Nurse Practitioner*	41				1.1%	of total assessed
Referred - School Nurse*†	613				16.4%	of total assessed

* - referrals may overlap, e.g., a student may have had high cholesterol, high BMI and a + family Hx

† - school nurse also receives referrals for three additional general health question responses



Healthy Heart Schools' Program

Research and Publishing Timeline

Print Date: July 11, 2011