

Factors that Influence Students' Decisions Surrounding Human Papillomavirus (HPV) Vaccination in York Region

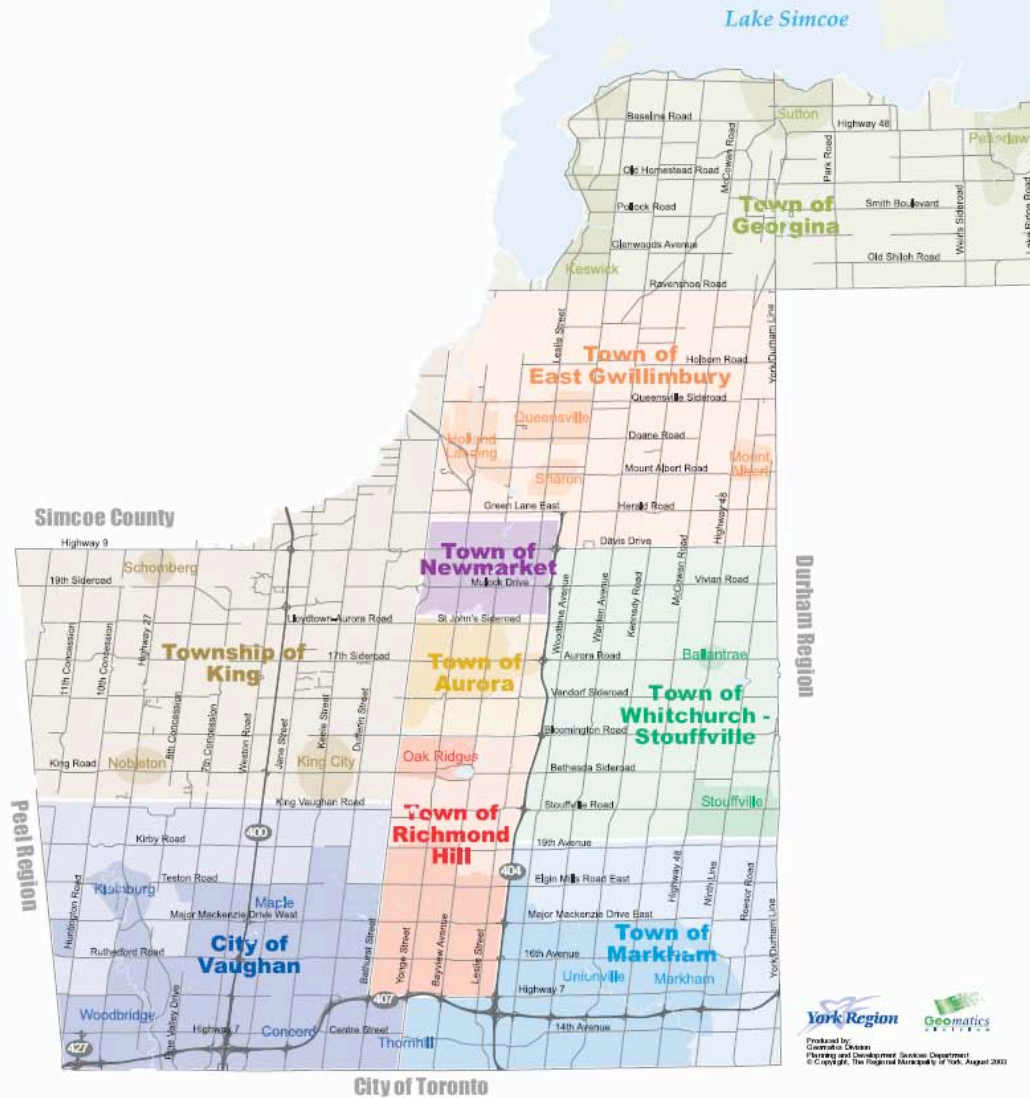
Ruth Diaz-Chambers, Denis Heng, Naomi Wackowiak
York Region Community & Health Services

Infectious Disease Control Division
York Region Community and Health Services



Presentation Overview

- HPV and cervical cancer
- HPV vaccine
- Survey objectives, methods & results
- Suggestions for improvement of HPV program delivery
- Summary



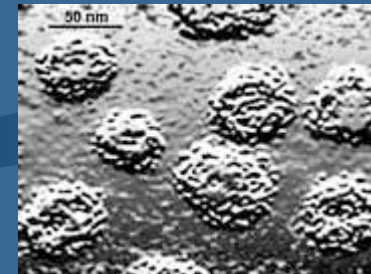
Welcome to York Region!

- Nine municipalities
- Population = 892,712 (2006 Census)
- Rapid population growth
- Densely populated southern municipalities



Human papillomavirus (HPV)

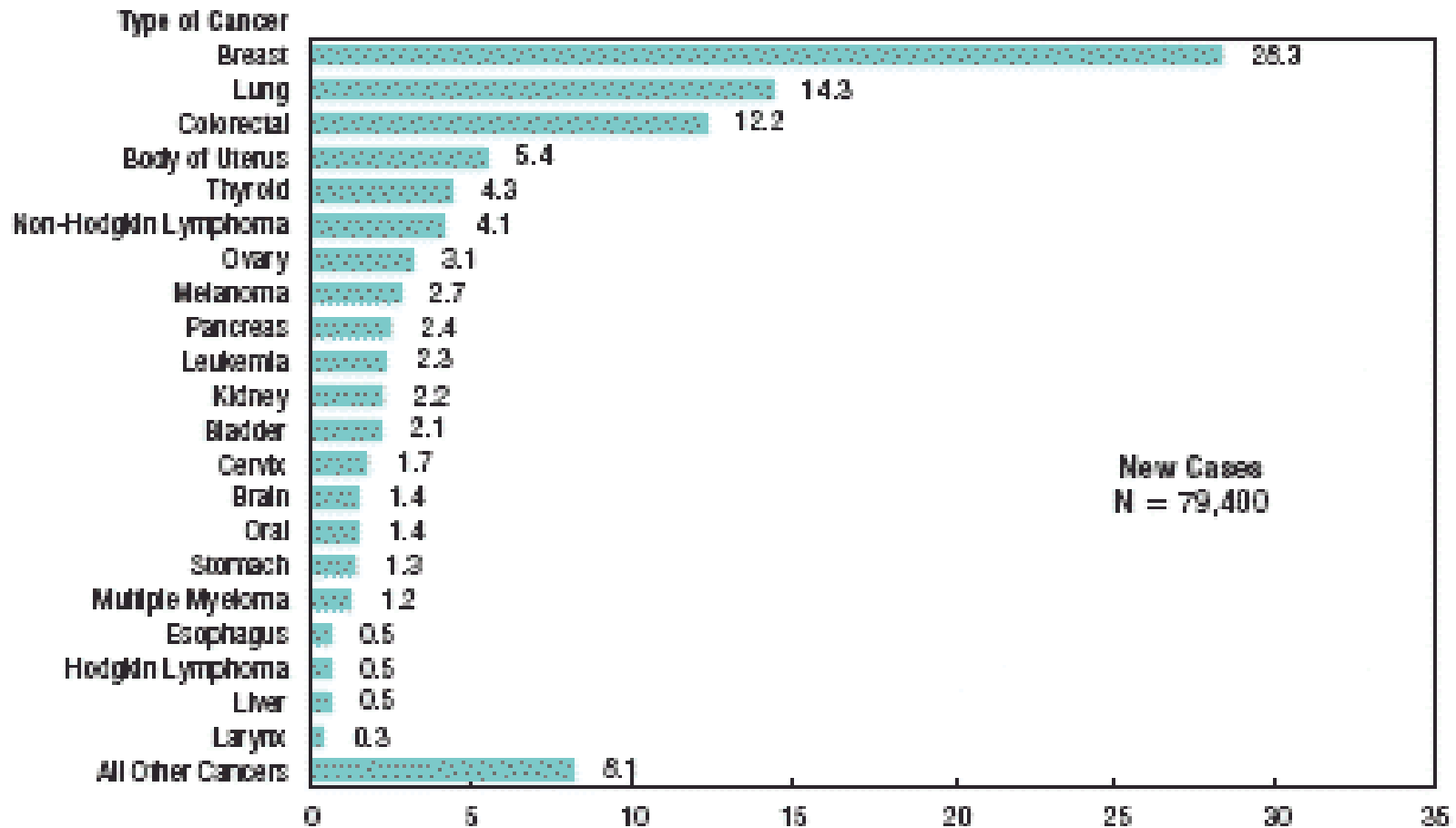
- Common sexually transmitted infection
- Associated with cervical cancer
 - Present in 99.7% of cervical cancer cases
 - 100+ types of HPV (~ 30 are carcinogenic)
- Will affect up to 75% of sexually active men and women in their lifetime





Cervical Cancer

Percentage Distribution of Estimated New Cases and Deaths for Selected Cancers, Females, Canada, 2008



Source: Canadian Cancer Statistics, 2008



HPV Vaccine

- Gardasil™ protects against 4 types of HPV
 - Types 6, 11 – Genital warts
 - Types 16, 18 – Cervical cancer
 - ~ 70% of cervical cancers in North America
- Most effective when administered prior to sexual debut





Provincial Program: Background

- August 2007: Government of Ontario implemented a voluntary school-based HPV vaccination program to grade-eight women
- December 2007: Canadian Immunization Committee recommends school-based HPV vaccination
 - Two-year goal; 80% immunization coverage
 - Five-year goal; 90% immunization coverage



Acceptability of HPV vaccination

- Published international studies indicate low public level of knowledge about HPV and its link to cervical cancer
- Factors influencing attitudes about HPV vaccine include; safety, effectiveness, perceived risk of disease severity, physician recommendations
- Ogilvie et al. *CMAJ* 2007:
 - 70% of survey respondents (n=1,350) intended to have their daughter vaccinated against HPV
 - Recommendations from health care professionals, family, friends, were strong predictors of intention



HPV Student Survey Objectives

To determine:

- Impact of pre-vaccination HPV education session delivered to students
- Factors influencing student decisions to receive the HPV vaccine



HPV Student Survey Target Sample

- Grade-eight females
- Schools holding clinics in November 2007
- District (Public) and Catholic School boards
- ~ 10% of eligible population
- 652 surveys collected over four weeks



Student Samples by School Board

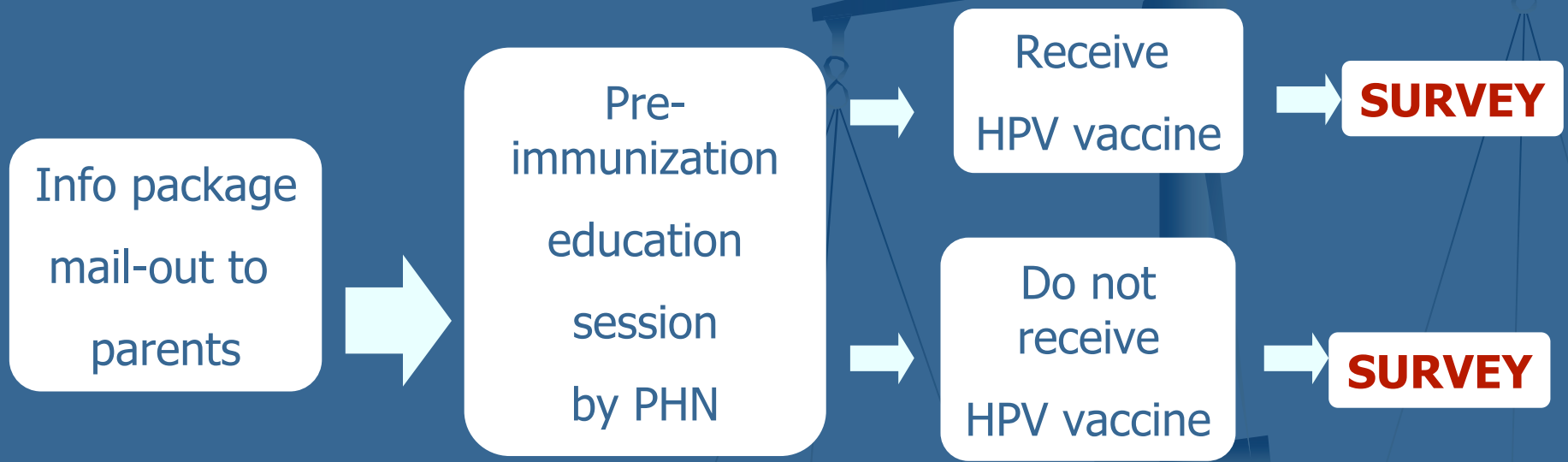
School Board	# Female Gr. 8 Students	# Schools in sample	# Female Gr. 8 Students sampled (% eligible)	# Students actually surveyed (% eligible)	Number of Respondents	Response Rate
Catholic	1,964	10	258 (13.1%)	200 (10.2%)	178 (9.1%)	89.0%
Public	4,165	21	573 (13.8%)	561 (13.5%)	474 (11.4%)	84.5%



HPV Student Survey Administration

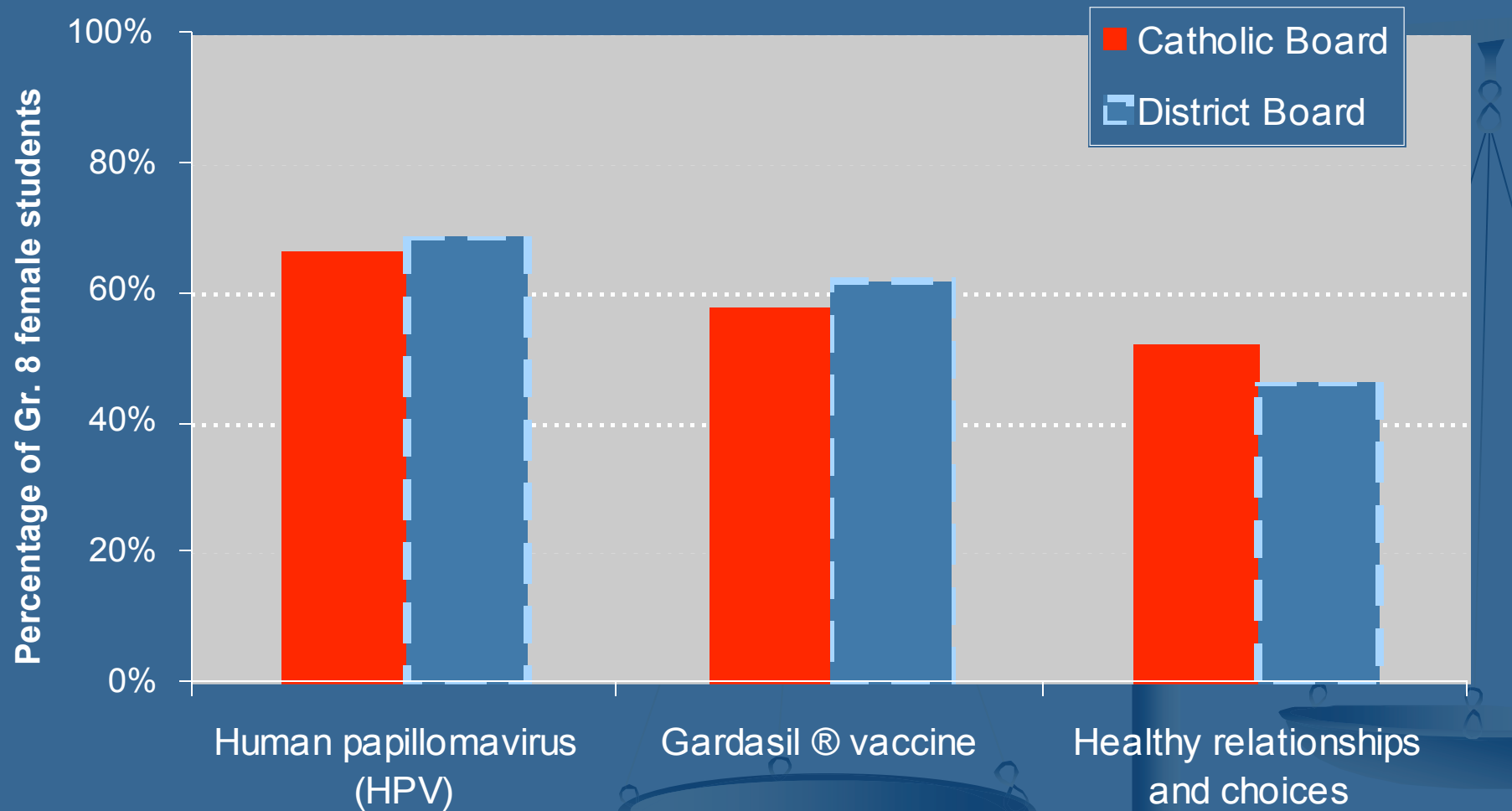
September 2007

November 2007



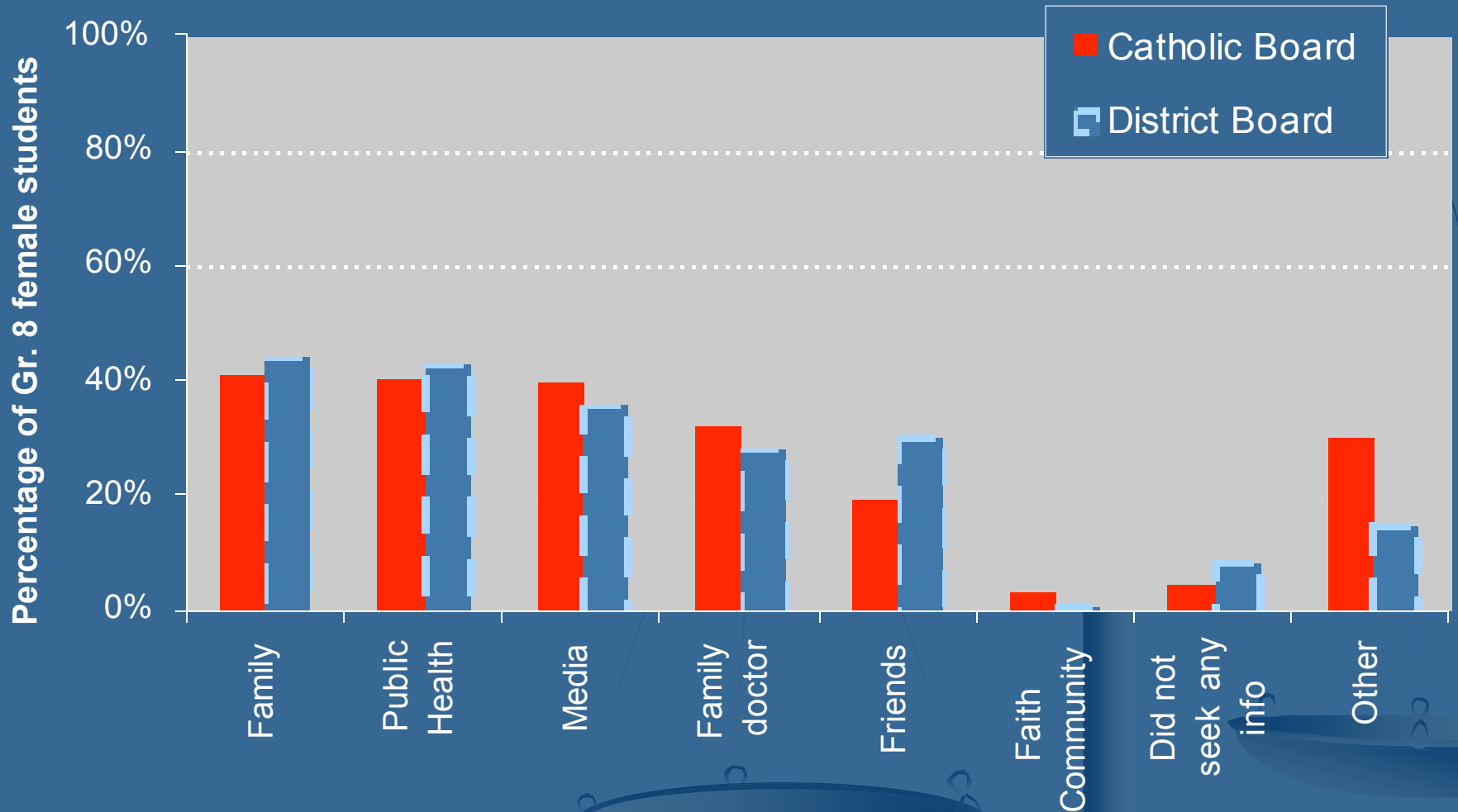


Percentage of students whose knowledge increased due to the education session



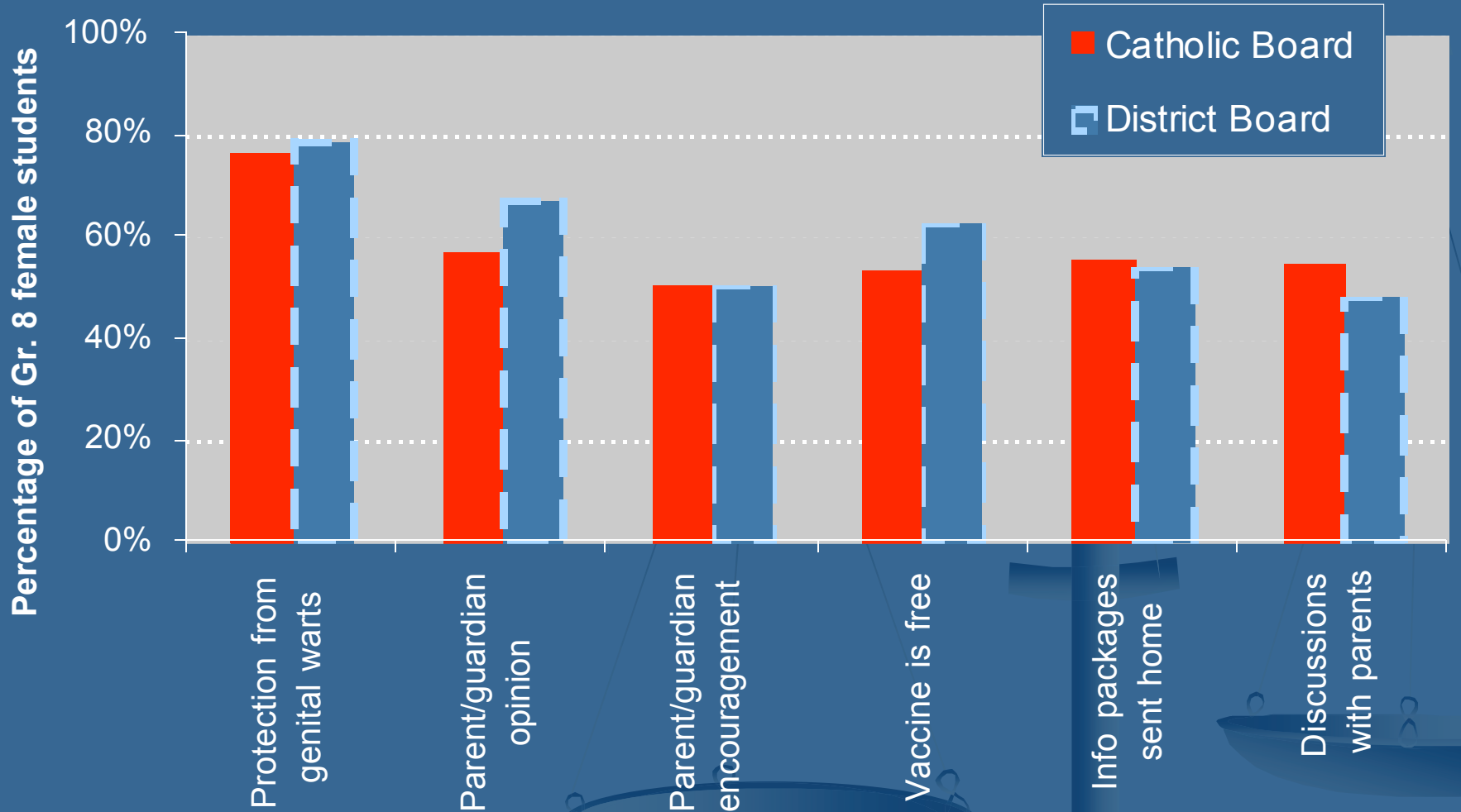


Sources of information regarding the HPV vaccine



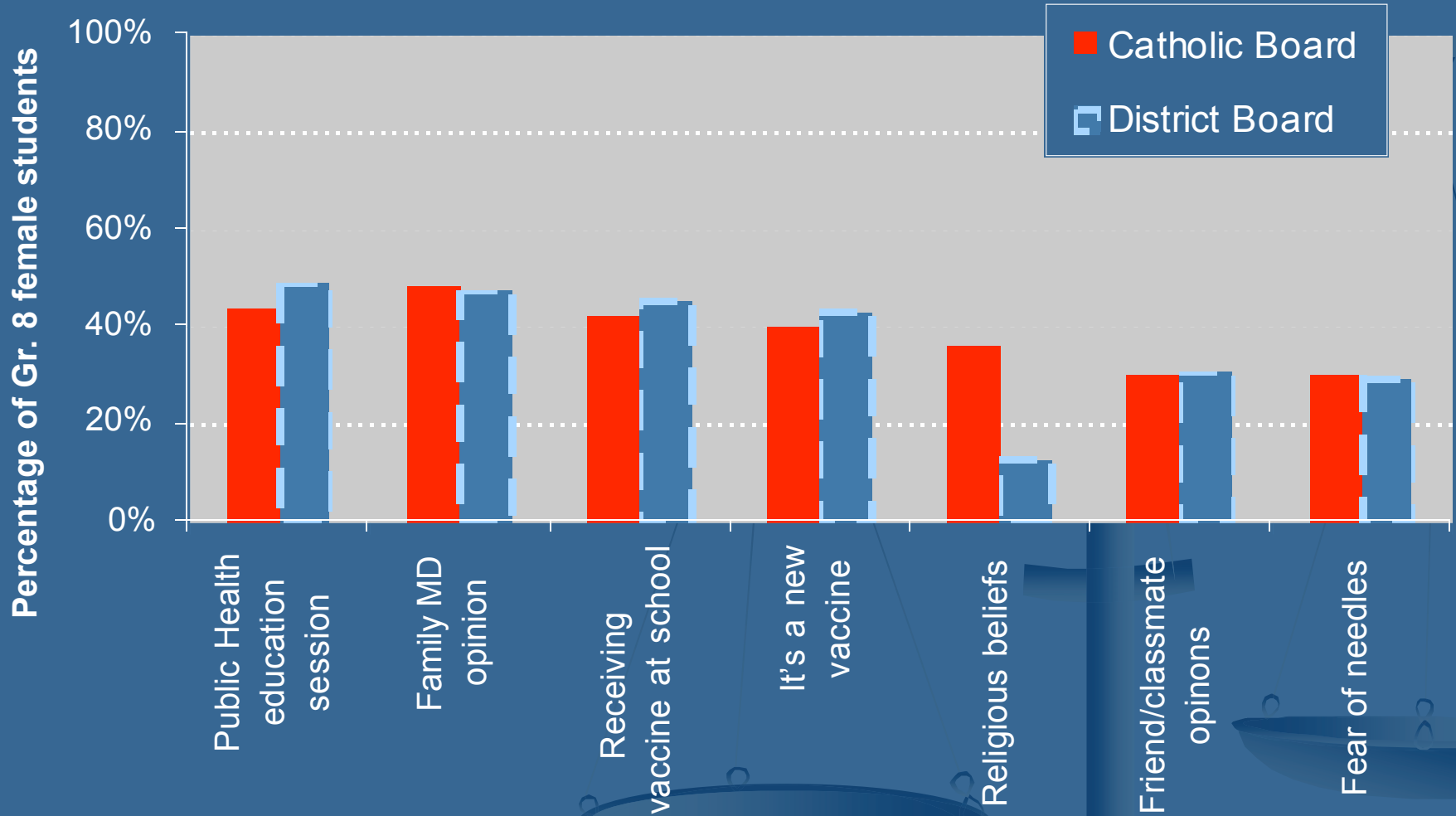


Factors that “strongly influenced” / “influenced” decision to receive HPV vaccine



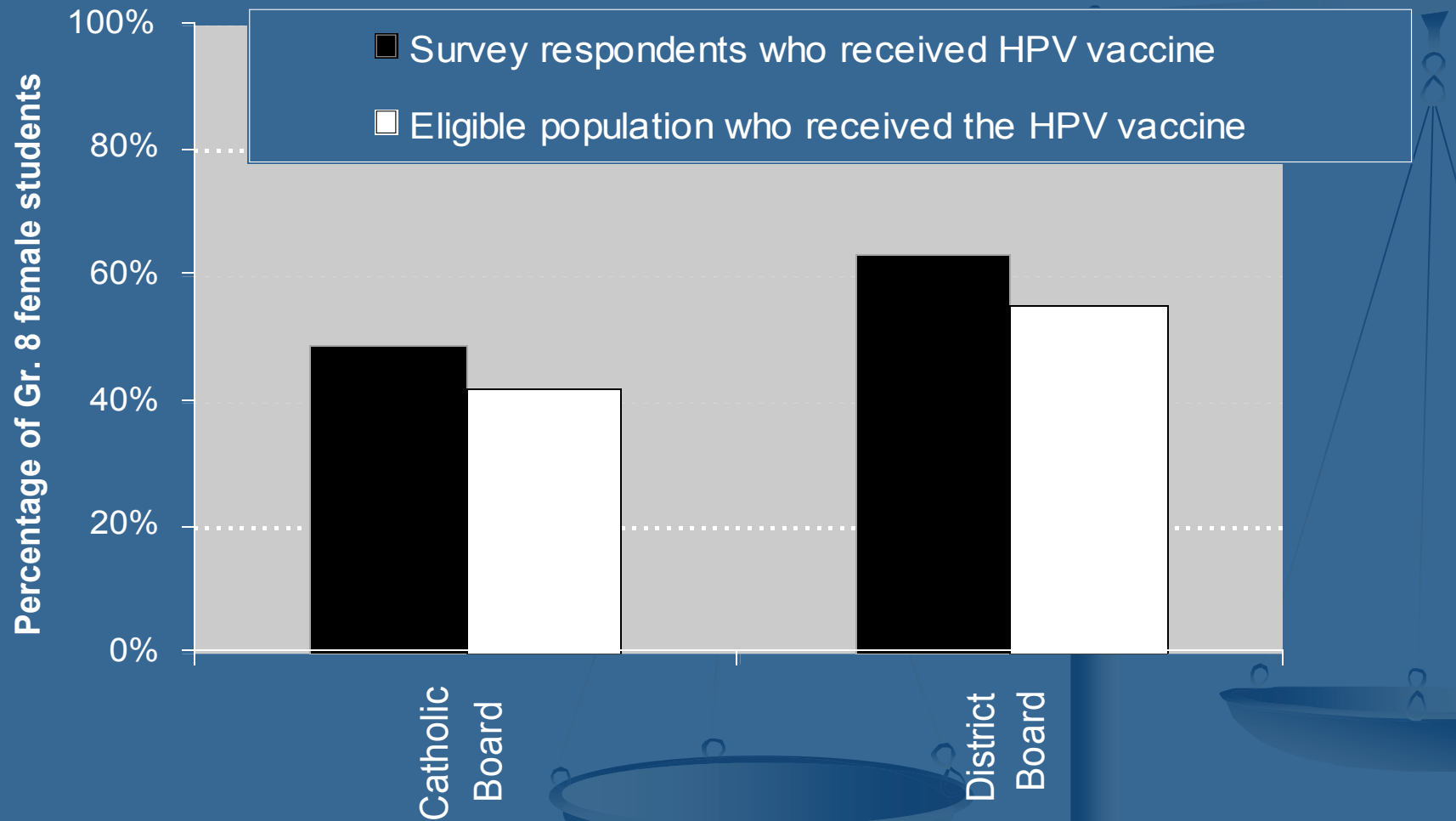


Factors that "somewhat influenced" decision to receive HPV vaccine



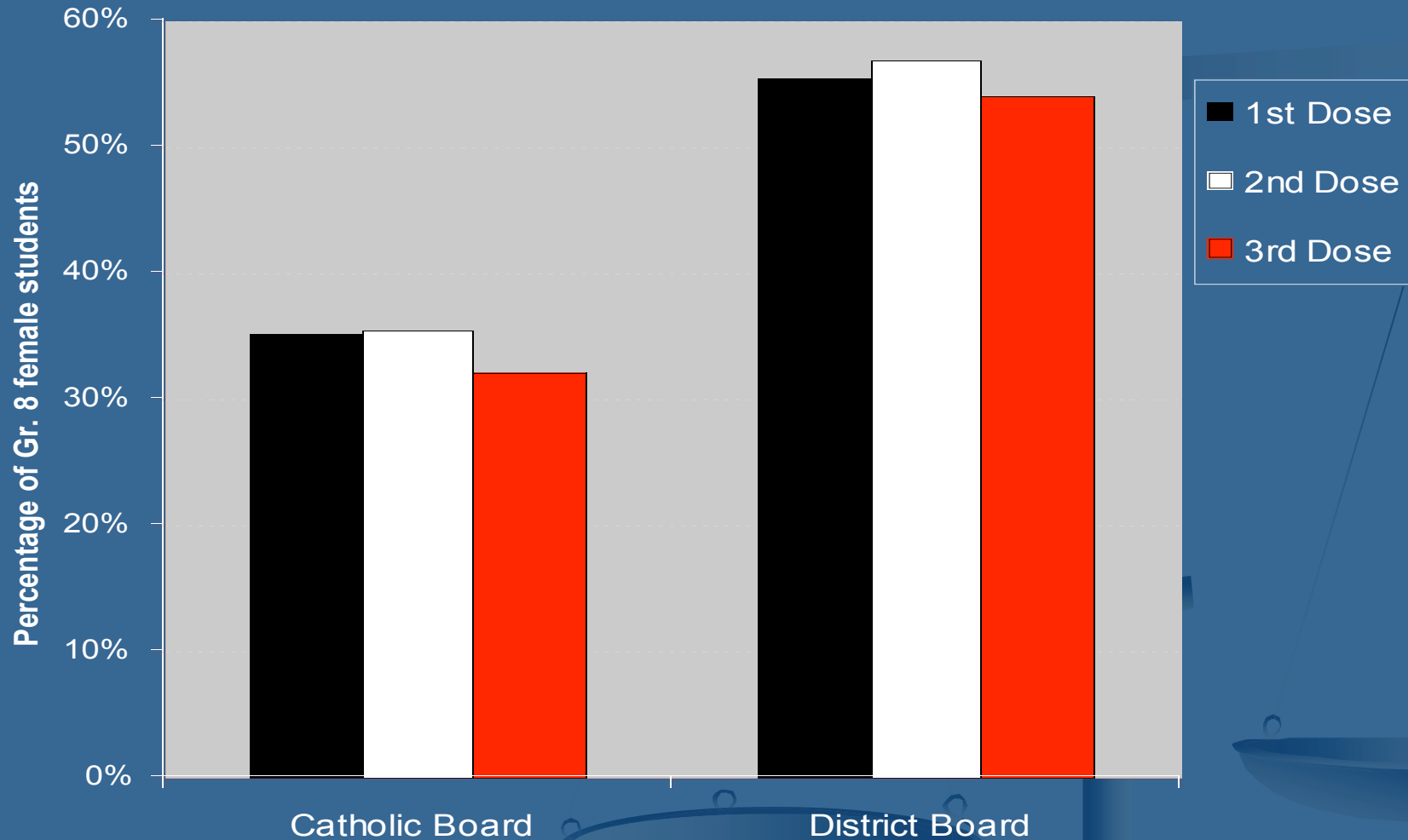


HPV vaccine uptake among survey respondents vs. eligible population (2007/08)





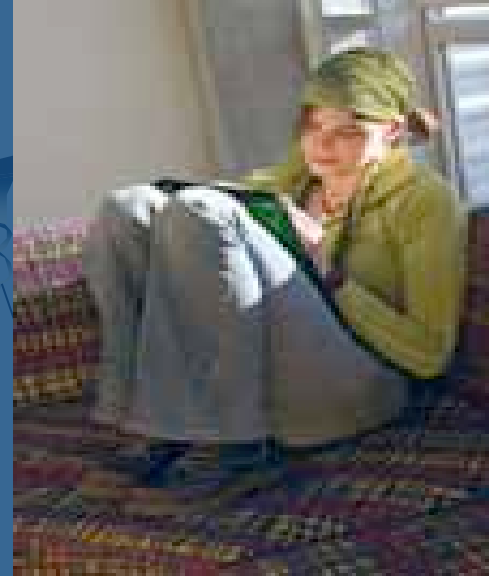
HPV vaccine uptake among grade-eight females in York Region (2007/08)





Improving delivery of the HPV Immunization Program

Timeliness of the dissemination of information to students



"Give the information before people have to make the decision of taking it or not"



Improving delivery of the HPV Immunization Program



Appropriateness of providing immunizations in a school-based setting

"I would suggest not taking the needle in front of all my classmates"



Improving delivery of the HPV Immunization Program

Provide additional information to students



"We could have been informed better about potential side effects of the vaccine"



HPV Student Survey Summary

- Pre-immunization education sessions increased HPV-related knowledge
- Knowledge regarding HPV, parental opinions and support from parents are major factors influencing the decision to receive HPV vaccine among students



Acknowledgements

- York Region Catholic & District School Boards
- York Region Public Health staff that have contributed to this project
- Infectious Disease Control Division PHNs and Support Staff, York Region Community and Health Services

