

Replace the existing “Report Interpretation Guide” section on pages 18 & 19 with the following:

Report Interpretation

The following section is focused on the analysis of the YHS data for school, school division and RHA reports. It is intended to assist end-users in further understanding the data in their reports. Results were either presented as percentages of the total student responses for each question, or as a derived variable. A derived variable is one that uses multiple survey questions in order to calculate another variable. For example, BMI is derived using information from the height, weight, age and sex questions in the survey.

Comparison of Data

The YHS data was **not** weighted for presentation in the school, school division and RHA reports. Therefore, comparing school, school division, regional or other combinations of YHS survey reports is not appropriate. The YHS data is only intended for internal use at the local level and not for the ranking or comparison of communities, school divisions and regions. It is also not appropriate to **directly** compare school, school division or regional reports to previous YHS reports because improvements and additions were made to the survey tool for 2012/13 and there may have been different grades surveyed in each cycle.

Results presented in the 2012/13 Provincial YHS Report have been weighted to represent all students registered in publically funded schools at September 30, 2012. Refer to the “Secondary Analysis of YHS Data” section of this User Guide.

Suppression Rules

Suppression rules were drafted to protect the privacy of students in cases where only a small number of students answered any response category to a pre-determined set of sensitive questions. Results were suppressed when ≤ 6 students or $\leq 6\%$ of students answered in any one of the response categories for these questions. The resulting graph or table featured an “S” to indicate that the data has been suppressed, or was reported as “too small to report” in the text.

The following questions were deemed as sensitive:

- Q16 – Mental health continuum
- Q 7 & 8 – BMI – overweight and obese categories only
- Q 42 & 43 – Smoking status
- Q 47 & 48 – Use of other tobacco products
- Q49 – How students obtain cigarettes
- Q52 – Desire to stop smoking
- Q54 & 55 – Alcohol use
- Q 56 & 57 – Drug use
- Q 58 – 61 – Drinking/drug use while driving or riding in a car
- Q 64 – 75 – Sexual health (except for preferred sources of information)

Each report was reviewed individually and suppression rules applied to ensure that students' privacy and confidentiality were maintained.

Missing Data

Each question had a certain amount of missing data (i.e., students who chose not to answer that question or answered illegibly). The results presented only included students who had a valid answer for the question being reported on. In cases where there was a large amount of missing data ($\geq 10\%$) a footnote was included in the graph or text to reflect this.

Data Analysis

The results for each question represent the percentage of students answering for each of the response categories of that question. In some cases, response categories were combined due to small numbers or for easier interpretation (e.g., combination of strongly agree/agree or strongly disagree/disagree). This is noted throughout the analysis guide.

The numerator represents the number of students who answered a particular response category for a question. The denominator is the total number of students who answered that question. For example, if 100 students answered the question about what grade they were in and 20 of them indicated that they were in Grade 7, then the report would show that 20% of students were in Grade 7. Only valid responses were counted in the denominator. (i.e., students with missing responses or who had their answers deemed as invalid were excluded). The results were presented in the tables, graphs and text throughout the YHS reports. The following pages include the calculations used for each question in the survey with the exception of the Physical and Health/Education Curriculum questions. These questions were not included in the school or school division reports as they were only intended for use in the evaluation of the Grade 11 and 12 Active Healthy Lifestyles: Physical/Health Education Curriculum.

Note: Question numbers follow that of survey version "B" (i.e., with sexual health) and are presented in the order that they appeared in the actual survey as opposed to the order they appeared in the feedback reports.

Secondary Analysis of YHS Data

The following section is focused on the secondary analysis of the YHS data for specific research questions or projects. It is intended to assist programmers, analysts and researchers in further understanding the weighted dataset and how it can be analyzed and interpreted.

Weighting of Data

Enrollment numbers (as of September 30, 2012) for all schools and school divisions in the province were received.

Using the most current version of the Manitoba Schools Book and the enrollment information received, we determined the number of eligible schools in each school division

(i.e. those with grades 7 to 12) and of those eligible schools, determined how many participated within each school division.

Calculate W1: (We assumed that within each school division, school participation in the YHS was random.)

$$W_1 = 1 \pi_{j1}$$

where π_{j1} is the probability of inclusion for school j at stage 1. Here $\pi_{j1} = n_k / N_k$ where n_k is the number of participating schools in the kth board and N_k is the number of eligible school in kth board

The following table was created.

Name of School Division	# of Eligible schools (N_k)	# of Participating schools within division (n_k)	W1=N_k/n_k
Any Place SD			
Green Grass SD			
etc			

Imputation of Missing Grade or Sex:

In some cases, the grade and/or sex of the student was missing from the YHS data file. We created a list of these students (sorted by survey ID number) and provided this list to Healthy Child for completion. Healthy Child provided some of the missing information from their student identification file. If the grade was still missing, the age was used to assign a grade as follows:

- <=12 – grade 7
- 13 – grade 8
- 14 – grade 9
- 15 – grade 10
- 16 – grade 11
- >=17 – grade 12

If the sex was still missing, it was imputed based on the gender identity question (Q.64) as follows:

- 1 – gender = 1 (Female)
- 2 – gender = 2 (Male)

If both sex and the gender identity were missing, that student was not included in the final data set. If grade and age were still missing after these imputations that student was not included in the final dataset.

Calculate W2 and W3: Using the enrollment information, we determined the number of eligible students in each school (i.e. those with grades 7 to 12). (We assumed that within schools students participated at random.) We determined the participation in each school by grade and sex.

NOTE: If the enrolment number was missing but that school participated in the survey we let the enrolment numbers equal the participation number for each grade.

$$W_2 = 1 \pi_{j2} \text{ where } \pi_{j2} = \frac{n_j(g)}{N_j(g)}$$

where $n_j(g)$ is the number of students who completed a survey in grade g in school and $N_j(g)$ is the total number of students who are in grade g in school j

$$W3 = W1 * W2$$

The following table was created.

Board_id	School_id	Grade	Sex	n_k	N_k	W1	$n_j(g)$	$N_j(g)$	W2	W3		
Any Place SD	ABC	7	M									
			F									
		8	M									
			F									
		9	M									
			F									
		10	M									
			F									
		11	M									
			F									
		12	M									
			F									
Green Grass SD	DEF		F									
	etc											

YHS Data Files and Documentation (available only to CCMB programming staff):
The final weighted data files are found in "I:\Databases\YHS 2012\Data".

School Administrators' survey:
 Yhs2012_admin_dataset_complete

Master dataset containing school level information:

Yhs2012_master

Student response data:

Yhs2012_pumf

Related documentation files are found in “I:\Databases\YHS 2012\Documentation”.

School Administrators’ survey code book:

2012 YHS Admin Survey Codebook.xlsx

Master dataset variable list and description:

Master Dataset Variables.xlsx

Student response dataset code book:

2012 YHS Codebook.xlsx

Similar data files for the 2006-2008 YHS survey can be found in “I:\Databases\YHS 2006-2008\Data”.

Yhs0608_pumf

Similar documentation files for the 2006-2008 YHS survey can be found in

“I:\Databases\YHS 2006-2008\Documentation”.

2008 YHS Codebook.xlsx