# INSTRUCTIONS FOR THE DATA ENTRY OF THE CANADIAN PUBLIC HEALTH ASSOCIATION'S SAFE SCHOOL SURVEYS

#### **INTRODUCTION:**

To accompany the Safe School Surveys, the Canadian Public Health Association has developed data entry files for schools to use to enter their data after the Safe School Surveys have been administered (please see the *Assessment Toolkit for Bullying*, *Harassment and Peer Relations at School* for more information on the administration of the surveys). These files are developed in Microsoft Excel® XP for the PC. If you have an older version of Excel®, these files are also available in Excel® 1998 on the website at www.cpha.ca/antibullying. Please keep in mind that these files were developed on a PC, if they are opened on a Macintosh computer you may encounter formatting differences within the files.

There are four data entry files: a Gr. 4-7 Safe School Student Survey file, a Gr. 8-12 Safe School Student Survey file, a Safe School Parent Survey file, and a Safe School Teacher/Adult School Staff survey file. These files will allow your school to enter your own data and provide you with statistics (frequencies and percentages) for your school without having to perform any analyses or functions. The Student data entry files provide data by grade and gender, as well as overall totals. The Teacher and Parent data entry files provide overall totals. It is **critical** for the accuracy of your results that the designated person(s) who is/are entering and interpreting your results read the following instructions.

#### **OVERVIEW**

The student data entry files, both the Gr. 4-7 and the Gr. 8-12, are made up of several sheets within an Excel® worksheet. Each sheet in the worksheet is labeled by grade. There is also a sheet that is labeled "Totals" in each, which gives you the totals for all grades added together. These labeled sheets are located at the bottom of the screen. Simply click on the labeled tabs to move between sheets. You are to enter surveys in the appropriate sheet for each grade. For example, a student in grade 5 would be entered in the sheet labeled "Gr. 5" in the Gr. 4-7 Data Entry file. As noted in the Instructions for Survey Administration located in the *Assessment Toolkit for Bullying*, *Harassment and Peer Relations at School* document, it is recommended that the surveys be organized by grade prior to data entry to ensure a smoother data entry process.

The parent data entry file contains three sheets. One sheet is labeled "Parent 1", one is labeled "Parent 2" and the other is labeled "Totals". The "Totals" sheet gives the totals for all parents in both sheets. All parent surveys are to be entered in the parent data entry file and all teacher surveys are to be entered in the teacher data entry file and each will provide totals. All of the data entry files (student, parent and teacher) have a similar data entry process which involves the data entry person(s) entering a series of "1"'s for each survey entered. The teacher data file is on just one sheet, as opposed to multiple sheets. Because it is not necessary to organize the teacher surveys into categories (i.e. grades), there is only a need for one sheet. The student data entry files differ from the parent and teacher files however, with respect to entering gender. The student files require that the data entry person(s) also enter an "m"(male) or an

"f"(female) in addition to the series of "1"s. The parent and teacher files do not require that gender be entered. Because bullying, harassment and discrimination in students can be gender specific, it is necessary for schools to have access to data that addresses this. The following are instructions related to each data file specifically:

# GR. 4-7 AND GR. 8-12 DATA ENTRY FILES

Please note that although the Gr. 4-7 and Gr. 8-12 data files are very similar, they are not identical. There are some differences in survey questions.

<u>NOTE</u>: If you have already opened these files you will notice that there are several error messages that look like this: **#DIV/0**! These are to be expected and will disappear after you start entering data. This error message will also be seen in the parent and teacher data entry files and will similarly disappear after data are entered.

Here is what the student work sheets look like:

Fig	gure 1	19				-		
	A	В	С	D	E	F	G	н
1	The Canadian Public Healt	h Association and th	e National	Crime Pr	evention S	trategy		
2	SAFE SO	CHOO	LS	UR	V JE V	(S		
3	Evaluation To	ols for School based	Anti-bull	ying Progr	ams			
5	Canadian Public Heal	ne de santé publique	National Crime Prev Stratégie nationale	pour la prévention o	lu crime			
6								
7		7				© CPHA		
8	Grade 4				Males	Females		
9		20-			2	1		
10					66.67%	33.33%		
11	PARTICIPANT NUMBER						1	2
12	TOTAL NUMBER OF PARTICI	PANTS			TOTAL:	3	1	1
13	GENDER = For Male insert "m",	for Female insert "f"					m	f
14	Survey Questions	Responses	Male	Female	Totals	Totals %		
15					-			
16	Q. 1 What grade are you in?	4	1	1	2	100.00%	1	1
17		5	0	0	0	0.00%		
18		8	0	0	0	0.00%		
19		7	0	0	0	0.00%		

In the student data entry files, all of the survey questions appear on the left hand side of the screen in column A. All responses for these questions are listed in column B. Columns C and D contain frequencies for Males and Females for each question and subsequent responses. To the right of the Male and Female frequencies are the Total frequencies and percentages. These indicate frequencies and percentages for both males<sup>2</sup> and females added together. If you look at row 11 in Figure 1, you will notice that it is<sup>2</sup>

labeled "Participant Number". This row contains numbers from 1-250. If you scroll to the right you will notice that the screen is split to allow you to scroll all the way to the end of the sheet to participant number 250 while still having the Survey Questions and Totals visible. The Excel® Worksheet only allows for 250 participants for each grade. If, for example, you are a school that has Gr. 7 and Gr. 8 students only, you may require more than 250 students in Gr. 7 and 8 each. In this case you would simply re-label all of the worksheets as "Gr. 7" in the 4-7 Data Entry File and re-label all of the sheets as "Gr. 8" in the 8-12 file. You can change the label of a sheet by double clicking on the sheet tab and typing in the new label. Through this process schools can enter more than 250 students for a particular grade. If you scroll down, you will also notice that the screen is split to allow the participant number (row 11) to be shown at all times. The split screen in both directions are for your convenience while entering the data.

Row 12 is labeled "Total Number of Participants". Column F-Row 12 or cell F12 (highlighted in bright yellow) indicates the total number of participants for that grade. A "1" will be entered in this row for each participant to allow for a total to be calculated. Details of this process will be discussed in the section titled "Entering your Data". An "m" or an "f" will be entered in Row 13, labeled "Gender", for each survey entered. Details of this process will also be discussed in the section titled "Entering Your Data". If you look in cells E8-E10 and F8-F10 you will see that these cells indicate the total number and percent of males and females entered for that grade.

## PARENT DATA ENTRY FILE

The parent data entry file looks like this:



# - 10 N

The Parent Data Entry File is set up the same way as the student files with the exception that there is no row for gender and subsequently there are no frequencies or percentages for males and females, thus an "m" or an "f" does not need to be entered. A "1" however, **does** need to be entered in row 12 for each participant. The total number of participants for that sheet is located in cell D12 (highlighted bright yellow). Total frequencies and percentages are also available for the parent surveys in columns C and D. Similar to the student data entry files, the maximum number of parent surveys that can be entered for each sheet is 250. To ensure that schools can enter more than 250 parents if they wish, there are two sheets that you can enter data into: "Parents1" and "Parents2". "Parents1" goes from participant 1-250 and "Parents2" goes from participant 251-500. The totals for both sheets together can be found on the "Totals" sheet.

# **TEACHER DATA ENTRY FILE**

### The teacher data entry file looks like this:

	Δ	B	C	D	E	F
1 2 3 4	The Canadian Public Health Assoc SAPESCH Evaluation Tools for	ciation and the National Crime I	Prevention S VES	trategy 7 S		
6 7 8	Canadian Public Health Association Association canadienne de santé p	n National Crime Prevention Strategy ublique Stratégie nationale pour la prévention	an du crime			
9 10 11					1	2
9 10 11 12	PARTICIPANT NUMBER		Total	2	1	2
9 10 11 12 13 14	Teachers         PARTICIPANT NUMBER         TOTAL # OF PARTICIPANTS         Survey Questions	Responses	Total: Totals	2 Totals %	1	2
9 10 11 12 13 14 15 16 17	Teachers         PARTICIPANT NUMBER         TOTAL # OF PARTICIPANTS         Survey Questions         Q. 1 What is your position?	Responses Teacher/educational assistant Guidance/social worker Other	Total: Totals 1 1 0	2 Totals % 50.00% 50.00% 0.00%	1 1 1	2 1 1

The teacher data entry file is identical to the parent data entry file and it thus differs from the student data entry files in the same way. There is no row for gender and subsequently there are no frequencies or percentages for males and females, thus an "m" or an "f" does not need to be entered. A "1" however, **does** need to be entered in row 12 for each participant. The total number of participants is located in cell D12

(highlighted bright yellow). Total frequencies and percentages are also available for the teacher surveys in columns C and D. The difference between the teacher file and the other data entry files is that there is only one sheet needed in the teacher file.

### **ENTERING YOUR DATA**

NOTE: It is highly recommended that the number of people entering the data for your school be limited to one or two people as the more people there are entering the data, the more likely that errors can occur. Similarly, the person(s) entering the data should be school staff and not parent or adult volunteers. This allows the rules and policies concerning confidentiality of students/staff in your school to be upheld.

#### 1. Student Surveys:

The data entry person(s) will enter the data vertically down the columns. For example, the first survey entered would be entered in column G; the second survey will be entered in column H and so on. The coloured shading and lines are for your convenience when entering the data. The following example is a step-by-step process for entering a survey:

**Step 1:** Click on the column G, row 12. Enter a "1" in cell C12. It is absolutely <u>critical</u> that a "1" is entered in row 12 for each participant. Failure to do so will affect your results as many formulas in the data entry files depend on this.

**Step 2:** Look at question 3 on the survey to see whether the participant checked off whether they were a male or a female. Click on cell G13 and enter an "m" if the participant is male or an "f" if the participant is female. The "m" and the "f" are to be in lowercase. It is absolutely <u>critical</u> that and "m" or an "f" is entered in row 13 for each participant.

**Step 3:** You will notice that the survey questions and their responses are on the left hand side of the screen. For question 1 in the 4-7 survey "What grade are you in?" for example, the response choices are Gr.4, Gr. 5, Gr. 6, and Gr. 7. Look at the survey and see what response the student checked off and enter a "1" in the participant's column in the appropriate row. For example, if the student checked he/she was in Gr. 4, enter a 1 in cell G16 (see Figure 1). Scroll down and repeat this process for each question in the participant's column.

NOTE: Some survey questions require that the students check off only one answer, while others require that more than one can be checked. Keep this in mind as you are entering the data. There can be instances when a student checks off more than one answer on a question that requires that only one answer be checked. This problem will be addressed later. In addition to this, some participants may not answer all of the questions. If this is the case simply leave that question blank and do not enter anything for the missing question then move on to the next question.

**Step 4:** Take the next survey and continue this process for each participant in each grade.

**NOTE**: It may be helpful to write the participant number on the survey as you enter each survey. This will allow you to know which surveys have been entered and will allow you to go back to the survey if an error is made in data entry

#### 2. Parent Surveys

The data entry process is identical to the student data entry process with the exception that gender does not need to be entered.

#### 3. Teacher Surveys

The data entry process is identical to the student data entry process with the exception that gender does not need to be entered.

## **INTERPRETING YOUR DATA**

The following are guidelines for interpreting each data entry file specifically. General guidelines for all data files will follow.

#### 1) Specific Guidelines

#### a) Student Data Entry Files

#### Interpreting by Grade Level

When interpreting data from the individual grade sheets (i.e. Gr. 7) the male and female totals in columns C and D can be interpreted as the number of males or females who chose that specific answer option for that certain question. For example, if you look at Figure 1, one male indicated that he was in grade 4 and 1 female indicated that she was in grade 4. The number of females and males within a grade can be found in cells E8-E10 and F8-F10. The numbers of course will be higher for your schools than those in the example. The Total frequencies and percentages located in columns E and F indicate the number and subsequent percentage of total students in that grade level who chose that certain answer option for that certain question. For example, cell E16 in Figure 1 indicates that 2 students in that grade level are in grade 4. Cell F16 indicates that cell E16 is 100% of those entered in the Gr. 4-7 Data Entry File.

#### Interpreting by Overall Totals

In the Student Data Entry files, there is a sheet in the worksheet that adds up the totals for all of the grades to create overall totals. The sheet tab is labeled "Totals". This sheet looks like this:

Figu	ire 4							
	A	В	С	D	E	F	G	Н
1	The Canadian Public H	lealth Associatio	n and t	he National	Crit	ne Prevent	ion Strates	IV.
2				TQ	77		A M C	
3					Ų.	N V I	319	
5	Evaluatio	blic Health Association	ol base	d Anti-bull National Crime Pres	ying rention St	Programs	-	
5	Association of	anadienne de santé publique		Stratégie nationale	pour la pr	évention du crime		<b>*</b>
6								
7		-					© CPHA	
8	Totals							Females
9		4					10	3
10							76.90%	23.10%
11	TOTAL NUMBER OF PARTICIPANTS TOTAL							13
12	Survey Questions	ons Responses		Males		Females Tot		Totals %
13								
14	Q. 1 What grade are you in?	4	1	10.00%	2	66.67%	3	23.08%
15		5	1	10.00%	0	0.00%	1	7.69%
16		6	7	70.00%	0	0.00%	7	53.85%
17		7	1	10.00%	1	33.33%	2	15.38%

As you enter data on the other sheets, this sheet creates totals for the whole sample (i.e. all students in grades 4-7 or all students in grades 8-12). Column C, D, E and F in Figure 4 indicate the overall frequencies and percentages of male and female responses to the survey questions. For example, Figure 4 cell C16 indicates that 7 out of the 10 males that answered question 1 indicated that they are in grade 6, cell D16 indicates that this amounts to 70% of the males that answered this question. Questions that have the participants enter more than one answer (i.e. Q. 8) are to be interpreted differently. For example (keeping with the Figure 4 numbers), if 7 males checked that they identified themselves as White and 4 males indicated that they identified themselves as Black, this would mean that 70% of males identified themselves as White and 40% identified themselves as Black. These numbers indicate that 1 male checked off both Black and White. As there can be overlap in responses, each question is interpreted independently. Therefore, the percentages for the response "Black" have no effect on the percentages for the response "White". Whereas, for questions in which only one option can be chosen, the percentages are related to each other and add up to 100%.

The Totals frequencies and percentages in columns G and H in Figure 4 can be similarly interpreted depending on which question type it is (multiple response or choose one only). Male and female overall frequencies and percentages for the whole sample (i.e. gr. 4-7 or gr. 8-12) can be found in cells G8-G10 and cells H8-H10. Similarly, the total number of participants entered can be found in cell H11.

#### b) Parent Data Entry File

The guidelines for interpreting parent data are identical to that of students with the exception that there is no male and female gender data in the parent file. The Totals columns in the sheet labeled "Totals" can be interpreted in the exact way as the Totals frequencies and percentages columns in the "Totals" sheet (i.e. Figure 4) in the student data entry files. The same guidelines that apply to the student survey questions apply to

the parent survey questions, in that statistics are to be interpreted differently depending on which question type it is (multiple response or choose one only).

### c) Teacher Data Entry File

The guidelines for interpreting teacher data are identical to that of students with the exception that there is no male and female gender data in the teacher file. The Totals columns in the teacher file can be interpreted in the exact way as the Totals frequencies and percentages columns in the "Totals" sheet (i.e. Figure 4) in the student data entry files. The same interpretation guidelines apply in that statistics are to be interpreted differently depending on which question type it is (multiple response or choose one only).

### 2) General Guidelines

Schools need to be <u>cautious</u> in how they interpret their data because the Data Entry Files provide descriptive data only (frequencies and percentages). Therefore, it cannot be established whether a difference of 10-15% between males and females on a certain question, for example, is statistically significant (the difference between them is not due to chance). However frequencies and percentages are very useful in identifying general trends and needs within your school.

Generalizability: If your school has a low overall survey completion rate, the school needs to be <u>cautious</u> in generalizing the results to the whole school, as the results may not represent your student population. The more surveys that are completed, the more generalizable the results become. Similarly, if numbers are low for certain classes, then the results may not be generalizable for that particular grade.

# **COMMON PROBLEMS**

**Circling more than one choice in a single choice question:** The person(s) entering the data may notice that participants have chosen two choices in a question that requests that only one response be chosen. In the CPHA Safe School Study, if a participant chose two responses, the more conservative choice was entered, (i.e. if a participant chose "once or twice" and "Never in 4 weeks", the "Never in 4 weeks choice was entered).

**Missing data or spoiled surveys:** If more than 50% of a survey has not been answered, or the participant has not entered the majority of the demographic questions (i.e. gender, grade, race, language), the survey should not be entered and is considered spoiled. Similarly, if a survey has any obvious patterns in the answers (i.e. zigzags, saying "Yes" to every answer) that are seen in more than 50% of the survey, the survey should be considered spoiled. The data entry person(s) will get a feel for surveys that have not been answered seriously. Entering spoiled surveys can skew your results. It is useful to look for variability in the answering style, i.e. does the student seem to be engaging in the survey? There may be instances where a participant will answer "No" to all questions in a section, for example, and that person has answered truthfully or seriously.

## ANONYMITY AND CONFIDENTIALITY OF THE DATA

It is <u>strongly</u> advised that the data entry files be kept in a secure place with access granted only to designated school staff. This will prevent the data from unintentionally being released. The Excel® files can be password protected by going into "Tools" and clicking on "Protection" and then choosing "Protect workbook".

Schools need to be cautious on how they share the data. It is not advised that you share certain data with the media as stats and figures can be sensationalized or manipulated (i.e. sexual harassment and racial discrimination questions).

**Important:** Schools need to ensure the anonymity and confidentiality of the participants completing the surveys. It should be impossible for someone to identify a certain student within the responses. If your school has a very low visible minority population, students can be identified from the surveys. In this instance, it is advised that students in your school do not fill out the race questions. Please refer to the Safe School Study Research Report (www.cpha.ca/antibullying) for information on ethics and confidentiality in relation to the surveys. More information can be found in the *Assessment Toolkit for Bullying, Harassment and Peer Relations at School* on the effects of the singling out students (i.e. visible minorities).

Do not enter any information that is written on the assistance request contact sheets on the last page of the student surveys.

# **QUALITATIVE DATA (TEXT ANSWERS)**

Schools may wish to record the written answers that participants give to open ended questions. They may wish to record it in Microsoft Word for example. It is very important that this qualitative data file be password protected. It is advised that only the data entry person(s) view these comments until all of the comments are stripped of identifiers (names) or inflammatory remarks that single out certain groups. Leaving these identifiers in may only inflame any problems in these areas within your school. Should a teacher or adult school staff, or a student be named in a comment, the data entry person(s) are to bring this to the attention of the principal of the school. The principal can then proceed with a plan of action to respond to any allegations.

### **PRINTING THE DATA ENTRY FILES**

To print the data entry files, simply go into the "View" menu and click on the "Page Break Preview" You can then adjust the page breaks to your choosing and print the results.