Global School-Based Student Health Survey (GSHS)

User guide for R module for Reporting

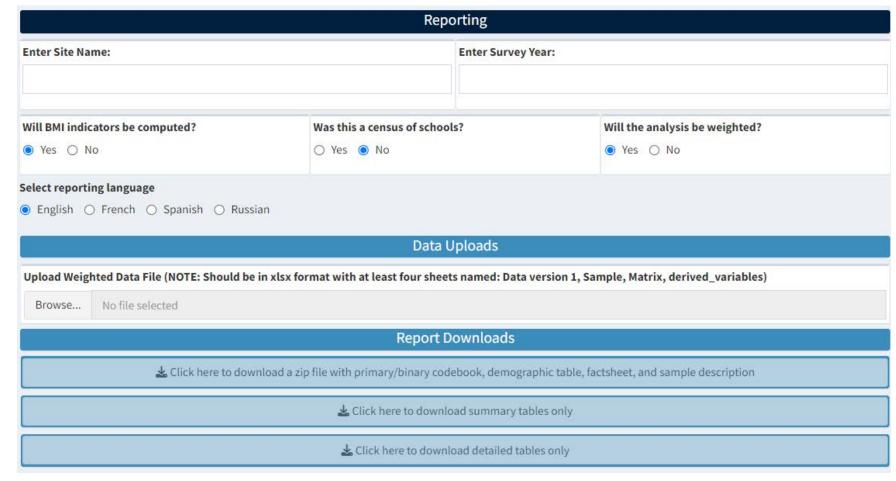**World Health Organization**

Overview

- After using the module to clean and weight your GSHS data, that module will return to you an Excel file that will serve as your **input file** for the reporting module. This file contains five tabs:
  1. **Data version 1** – a cleaned, weighted version of your dataset with all variables renamed to standard variable names and all binary indicator variables added
  2. **Data version 2** – same as Data version 1 but with a copy of the variables with their original names and *school and class identifiers*
  3. **Sample** – a list of sampled schools with information for each on eligible classes and students and selected/participating classes and students
  4. **Matrix** – information about your questionnaire and desired indicators
  5. **derived_variables** – details of indicators derived from 2 or more variables

- If data have been prepared using the Processing and Weighting module in R, no further preparation is needed to use the Reporting module.
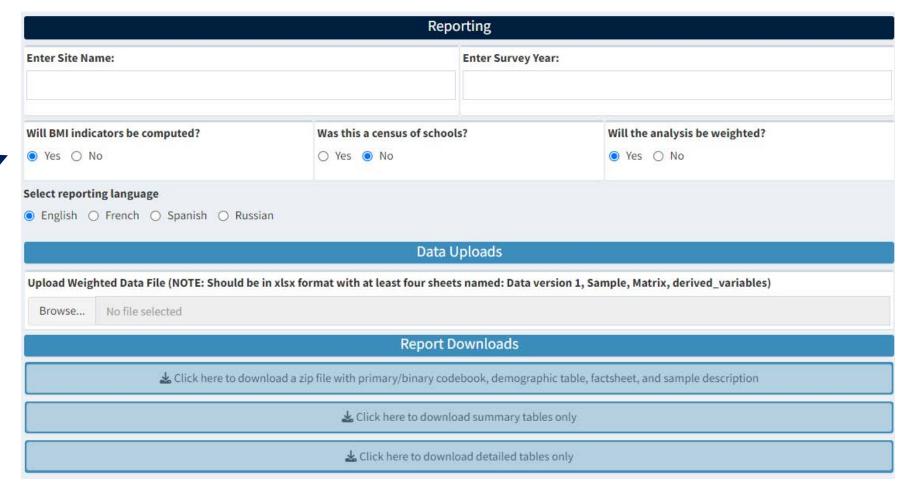
Note: Data version 2 is not required for the Reporting module.

Reporting – Shiny app

Enter the site name and survey year. These will appear on all your reporting documents.
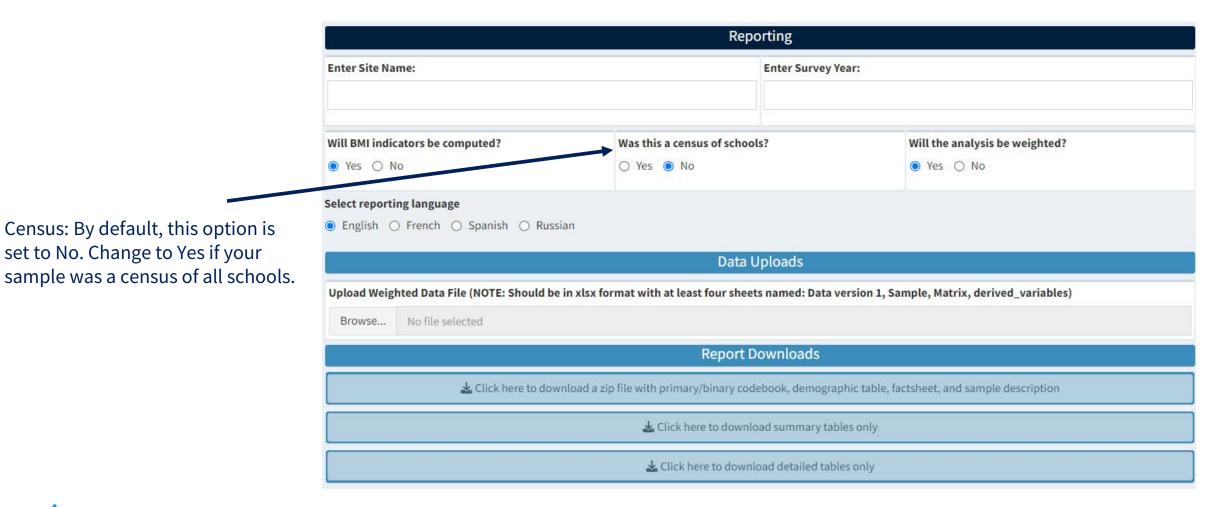
Reporting – Shiny app

BMI indicators: By default, this option is set to Yes. Change to No if height and weight were not included in your questionnaire or if the percentage of students reporting valid values for height and weight is very low.

Reporting – Shiny app

Census: By default, this option is set to No. Change to Yes if your sample was a census of all schools.

Reporting – Shiny app
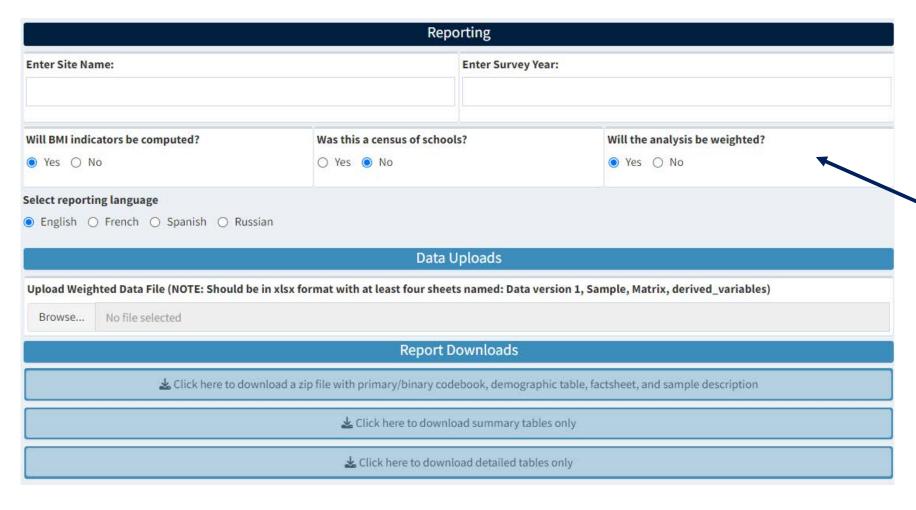

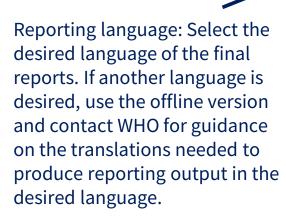Weighted analysis: By default, this option is set to Yes. Set to No if the overall response rate of your survey was very low (below 60%).

Reporting – Shiny app

Reporting language: Select the desired language of the final reports. If another language is desired, use the offline version and contact WHO for guidance on the translations needed to produce reporting output in the desired language.

Reporting – Shiny app

Click on Browse to select and upload your input file.

Reporting – Shiny app

Once the input file has been uploaded click on one of the 3 boxes under "Report Downloads" to download reporting documents for your survey.

Note: The code to produce the summary tables and detailed tables normally takes several minutes and may not complete successfully through the online version of the Shiny app. It is thus recommended to download the Shiny app and run it directly on your machine to produce these documents.

Reporting Documents: Codebook

The codebook provides both a mapping of the original variable names to the standard variable names as well as a simple tabulation of every question.

Country Name
Codebook

Standard Variable Name	Country Questionnaire Number	Question Code and Label		Unweighted Frequency	Weighted Percentage
HY_WASHEAT	Q19	During the past 30 days, how often did you wash your hands before eating?			
		A	Never	50	2.5
		B	Rarely	64	3.1
		C	Sometimes	869	42.6
		D	Most of the time	499	26.3
		E	Always	481	25.5
			Missing	32	
HY_WASHTOILET	Q20	During the past 30 days, how often did you wash your hands after using the toilet or latrine?			
		A	Never	65	3.4
		B	Rarely	146	7.8
		C	Sometimes	377	18.8
		D	Most of the time	549	27.3
		E	Always	827	42.6
			Missing	31	
HY_WASHSOAP	Q21	During the past 30 days, how often did you use soap when washing your hands?			
		A	Never	80	4.0
		B	Rarely	65	3.1
		C	Sometimes	925	45.0
		D	Most of the time	465	23.6
		E	Always	445	24.2
			Missing	15	

Reporting Documents: Binary Codebook

The binary codebook provides simple tabulations for all derived, binary (yes/no) variables.

Country Name

Codebook

Standard Variable Name	Question Code and Label	Unweighted Frequency	Weighted Percentage
PA_B_LITTLESLEEP	Percentage of students who got less than eight hours of sleep on an average school night		
	Yes	6456	61.4
	No	3557	38.6
	Missing	46	
PF_B_MISSSCH	Percentage of students who missed classes or school without permission (on at least 1 day during the 30 days before the survey)		
	Yes	3357	32.3
	No	6608	67.7
	Missing	94	
PF_B_STUDENTKIND	Percentage of students who reported that most of the students in their school were most of the time or always kind and helpful (during the 30 days before the survey)		
	Yes	4712	44.3
	No	5238	55.7
	Missing	109	
PF_B_STUDENTNOTKIND	Percentage of students who reported that most of the students in their school were never or rarely kind and helpful (during the 30 days before the survey)		
	Yes	2285	26.0
	No	7665	74.0
	Missing	109	

World Health Organization

Reporting Documents: Fact Sheet

The fact sheet is a two-page document intended for dissemination that contains a brief description of the survey and key results for each core module.

Global School-based Student Health Survey
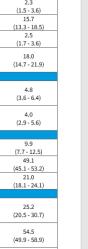## Mongolia
2023 Fact Sheet

The 2023 Mongolia GSHS was a school-based survey of students in Grade 8 - Grade 12 (typically attended by students aged 13 – 17 years). A two-stage cluster sample design was used to produce data representative of all students in Grade 8 - Grade 12 in Mongolia. At the first stage, 51 schools were selected with probability proportional to enrollment size. At the second stage, classes were randomly selected and all students in selected classes were eligible to participate.

The Mongolia GSHS measured Alcohol Use; Dietary Behaviours; Hygiene; Mental Health; Protective Factors; Sexual Behaviours; Tobacco Use; & Violence and Unintentional Injury. Students self-reported their responses to each question on a computer scannable answer sheet.

The school response rate was 100.0%, the student response rate was 85.9%, and the overall response rate was 85.9%. A total of 3311 students participated in the Mongolia GSHS. Weighted prevalence estimates (percentages) and 95% confidence intervals are presented below.

Results for Students Aged 13-17 Years	Total	Boys	Girls
Alcohol Use			
Percentage of students who currently drank alcohol (at least one drink containing alcohol on at least 1 day during the 30 days before the survey)	10.8 (8.3 - 14.0)	11.2 (8.2 - 15.1)	10.5 (7.7 - 14.0)
Percentage of students who drank so much alcohol that they were really drunk (one or more times during their life)	14.5 (12.2 - 17.2)	16.4 (13.7 - 19.5)	12.7 (9.8 - 16.2)
Dietary Behaviours			
Percentage of students who were underweight (<-2SD from median for BMI by age and sex)	3.2 (2.4 - 4.4)	4.2 (3.0 - 5.9)	2.3 (1.5 - 3.6)
Percentage of students who were overweight (>+1SD from median for BMI by age and sex)	14.6 (12.1 - 17.4)	13.3 (10.2 - 17.1)	15.7 (13.3 - 18.5)
Percentage of students who were obese (>+2SD from median for BMI by age and sex)	3.0 (2.2 - 4.2)	3.6 (2.3 - 5.5)	2.5 (1.7 - 3.6)
Percentage of students who drank any sugar-sweetened drink one or more times per day (during the 7 days before the survey)	16.6 (14.3 - 19.2)	14.8 (12.5 - 17.6)	18.0 (14.7 - 21.9)
Hygiene			
Percentage of students who did not clean or brush their teeth or usually cleaned or brushed their teeth less than 1 time per day (during the 30 days before the survey)	6.5 (5.1 - 8.1)	8.3 (6.4 - 10.7)	4.8 (3.6 - 6.4)
Percentage of students who never or rarely washed their hands after using the toilet or latrine (during the 30 days before the survey)	4.2 (3.1 - 5.7)	4.1 (2.8 - 5.9)	4.0 (2.9 - 5.6)
Mental Health			
Percentage of students who have no close friends	8.2 (6.8 - 10.0)	6.6 (5.3 - 8.2)	9.9 (7.7 - 12.5)
Percentage of students who seriously considered attempting suicide (during the 12 months before the survey)	39.0 (36.3 - 41.8)	28.3 (24.6 - 32.3)	49.1 (45.1 - 53.2)
Percentage of students who attempted suicide (one or more times during the 12 months before the survey)	15.8 (13.8 - 18.0)	10.2 (8.0 - 12.9)	21.0 (18.1 - 24.1)
Protective Factors			
Percentage of students who missed classes or school without permission (on at least 1 day during the 30 days before the survey)	26.5 (22.7 - 30.7)	27.8 (23.8 - 32.1)	25.2 (20.5 - 30.7)
Percentage of students who reported that their parents or guardians never or rarely understood their problems and worries (during the 30 days before the survey)	57.3 (54.4 - 60.2)	60.6 (57.1 - 64.0)	54.5 (49.9 - 58.9)
Percentage of students who reported that their parents or guardians never or rarely really knew what they were doing with their free time (during the 30 days before the survey)	25.9 (23.4 - 28.6)	26.1 (23.2 - 29.2)	25.6 (22.5 - 28.9)

Results for Students Aged 13-17 Years	Total	Boys	Girls
Sexual Behaviours			
Percentage of students who ever had sexual intercourse	18.9 (16.4 - 21.8)	21.7 (17.9 - 26.1)	16.4 (14.3 - 18.8)
Percentage of students who used a condom during last sexual intercourse (among students who ever had sexual intercourse)	63.9 (55.8 - 71.3)	70.8 (63.9 - 76.9)	55.1 (43.3 - 66.4)
Tobacco Use			
Percentage of students who currently smoked cigarettes (on at least 1 day during the 30 days before the survey)	11.1 (9.0 - 13.5)	17.2 (14.0 - 20.8)	5.3 (4.0 - 7.1)
Percentage of students who currently used a tobacco product (on at least 1 day during the 30 days before the survey)	19.9 (17.7 - 22.2)	28.6 (25.4 - 32.1)	11.7 (10.0 - 13.6)
Percentage of students who currently used electronic cigarettes (on at least 1 day during the 30 days before the survey)	24.8 (20.9 - 29.2)	29.9 (25.5 - 34.6)	20.0 (15.7 - 25.2)
Violence and Unintentional Injury			
Percentage of students who were seriously injured (one or more times during the 12 months before the survey)	39.6 (36.4 - 42.8)	41.7 (37.6 - 45.9)	37.5 (32.8 - 42.4)
Percentage of students who were in a physical fight (one or more times during the 12 months before the survey)	28.3 (26.1 - 30.6)	37.8 (35.0 - 40.7)	19.2 (16.8 - 21.9)
Percentage of students who were bullied on school property (during the 12 months before the survey)	26.9 (25.2 - 28.6)	28.6 (26.1 - 31.2)	25.1 (22.5 - 27.9)
Percentage of students who were cyber bullied (during the 12 months before the survey)	17.9 (16.5 - 19.3)	14.1 (12.3 - 16.0)	21.3 (19.2 - 23.6)

For additional information, please contact:
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For general information about the GSHS, please visit:
https://www.who.int/teams/noncommunicable-diseases/surveillance/systems-tools/global-school-based-student-health-survey

Reporting Documents: Demographics Table

The demographics table contains detailed information on the composition of the sample by age, sex and grade.

Country Name
Demographic Table – Unweighted and Weighted Data

	Total			Male			Female			Missing
	N	Unweighted Percentage	Weighted Percentage	N	Unweighted Percentage	Weighted Percentage	N	Unweighted Percentage	Weighted Percentage	
Total	3467			1674			1778			15
Age (Years)										
12 or younger	362	10.4	20.1	174	10.4	18.6	183	10.3	21.4	5
13 - 15	1953	56.4	76.7	959	57.4	77.3	986	55.5	76.4	8
16 or 17	1056	30.5	3.1	482	28.8	4.0	573	32.2	2.2	1
18 or older	94	2.7	0.1	57	3.4	0.1	36	2.0	0.1	1
Missing	2	-	-	2	-	-	0	-	-	0
Grade										
Class 7	590	17.1	33.2	306	18.4	32.9	278	15.7	33.1	6
Class 8	632	18.3	32.6	318	19.1	32.7	311	17.5	32.7	3
Class 9	622	18.0	32.4	322	19.3	32.7	299	16.9	32.4	1
Class 10	641	18.6	0.8	314	18.8	0.8	325	18.3	0.8	2
Class 11	537	15.6	0.5	215	12.9	0.5	321	18.1	0.5	1
Class 12	431	12.5	0.5	191	11.5	0.5	240	13.5	0.6	0
Missing	14	-	-	8	-	-	4	-	-	2

N = Number of students in this subgroup

1

Reporting Documents: Sample Description

The sample description document presents a brief summary of the sampling, weighting and response rate calculation.

Country Name Survey
Sample Description and Weighting Procedures

Sample Description:

School Level – All schools containing 7th grade - 12th grade were included in the sampling frame. 52 schools were sampled with probability proportional to enrollment.

Class Level - All classes with the majority of students in 7th grade - 12th grade were included in the sampling frame. Systematic equal probability sampling with a random start was used to select classes from each school that participated in the survey.

Response Rates:

Schools -   100.0%   52 of the 52 sampled schools participated.

Students -   82.2%   2927 of the 3560 sampled students completed questionnaires. 2927 questionnaires were usable after data editing.

Overall response rate -   100.0%*82.2% = 82.2%

Weighting:

A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of nonresponse. The weight used for estimation is given by:

$$W = W1 * W2 * f1 * f2 * f3$$

W1   =   the inverse of the probability of selecting the school;

W2   =   the inverse of the probability of selecting the classroom within the school;
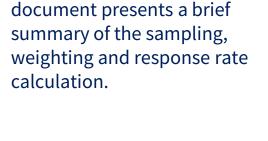
f1   =   a school-level nonresponse adjustment factor calculated by school size category (small, medium, large). The factor was calculated in terms of school enrollment instead of number of schools.

f2   =   a student-level nonresponse adjustment factor calculated by class.

f3   =   a poststratification adjustment factor calculated by grade.

Use of the Weighted Results:

The weighted results can be used to make important inferences about the priority health-risk behaviors and protective factors of all students in 7th grade - 12th grade in Country Name.

Reporting Documents: Detailed Tables

The detailed tables is one of the longer documents, containing 3 pages per question (total, males only, females only) each containing a full tabulation of responses by age and grade.

Country Name
Detailed Tables – Weighted Data

DB_BREAKFAST: During the past 30 days, how often did you eat breakfast?

Females			Age					Grade					
		All females	12 or younger	13-15	16-17	13-17	18 or older	Form 1	Form 2	Form 3	Form 4	Form 5	Form 6
Never	%	2.5	-	1.3	2.9	2.0	3.2	0.9	2.2	5.3	0.8	2.9	-
	N	28	2	7	9	16	10	3	4	9	1	8	2
Rarely	%	3.8	-	3.2	4.7	3.9	3.6	2.7	3.6	4.2	0.9	9.0	-
	N	35	1	12	13	25	9	8	7	7	1	7	5
Sometimes	%	40.2	-	39.0	41.9	40.4	42.8	38.7	46.8	31.2	44.7	42.0	-
	N	419	8	159	173	332	77	111	91	86	55	49	25
Almost daily	%	27.9	-	27.5	29.1	28.2	23.8	30.5	24.7	30.4	27.7	21.2	-
	N	297	12	120	117	237	45	94	48	77	31	27	19
Daily	%	25.6	-	29.0	21.4	25.4	26.6	27.1	22.7	28.9	25.8	25.0	-
	N	278	9	118	99	217	49	79	42	81	30	28	18
Total	%	100%	-	100%	100%	100%	100%	100%	100%	100%	100%	100%	-
	N	1057	32	416	411	827	190	295	192	260	118	119	69

Reporting Documents: Summary Tables

The summary tables is one of the longer documents, containing 1 page per indicator each containing a full tabulation of responses by sex, age and grade.

Country Name

Summary Tables - Weighted Data

DB_B_FRUIT3: Percentage of students who ate fruit three or more times per day (during the 7 days before the survey)

	Total			Males			Females		
	Percentage	95% confidence interval	N	Percentage	95% confidence interval	N	Percentage	95% confidence interval	N
Total	9.7	(8.1 - 11.5)	2917	10.2	(8.3 - 12.5)	1387	9.1	(7.1 - 11.6)	1530
Age (Years)									
12 or younger	-	-	91	-	-	54	-	-	37
13 - 15	11.5	(9.3 - 14.1)	1801	13.0	(9.9 - 16.8)	884	10.1	(7.3 - 13.9)	917
16 or 17	6.3	(4.8 - 8.3)	955	5.8	(3.9 - 8.5)	399	6.7	(4.6 - 9.8)	556
13 - 17	9.7	(8.1 - 11.6)	2756	10.5	(8.6 - 12.9)	1283	8.9	(6.9 - 11.5)	1473
18 or older	-	-	70	-	-	50	-	-	20
Grade									
7th grade	14.9	(11.1 - 19.6)	639	15.6	(10.6 - 22.3)	339	14.2	(9.4 - 21.0)	300
8th grade	10.3	(7.1 - 14.7)	601	11.0	(7.4 - 16.1)	333	9.5	(5.6 - 15.9)	268
9th grade	8.9	(6.0 - 13.0)	590	10.3	(6.9 - 15.2)	264	7.6	(4.4 - 12.9)	326
10th grade	7.1	(5.1 - 9.7)	581	9.0	(6.0 - 13.4)	206	5.4	(3.4 - 8.5)	375
11th grade	6.7	(3.7 - 11.9)	270	5.6	(2.8 - 10.8)	110	7.7	(4.0 - 14.4)	160
12th grade	5.0	(2.2 - 11.1)	236	2.9	(1.1 - 7.5)	135	7.1	(3.6 - 13.6)	101

N = Number of students in this group
- = student subgroup with less than 100

9