



Pohnpei Rapid Youth Survey

2019 Report

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Office of the Director

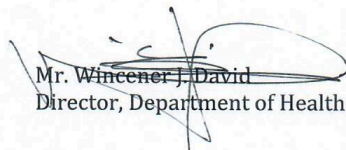
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Letter of Endorsement

It is truly an honor as I, Wincener J. David, Director of the Pohnpei State Health and Social Services officially endorse the Pohnpei State 2019 RAPID Youth Survey. This is the third time that Pohnpei State has implemented the RAPID Survey and it is exciting to see the trends of data of our youths unfold. This report presents findings from the 2019 RAPID Survey in comparison to the 2015 and 2017 RAPID surveys. My utmost appreciation goes out to the Division of Primary Health Care and our National and Regional partners in the planning, preparation and implementation of the 2019 RAPID Survey. The findings of this survey will help guide the decision-making of the Pohnpei state Department of Health and Social Services in the prevention and control of Non-communicable diseases.

Ni Wahu,



Mr. Wincener J. David
Director, Department of Health and Social Services

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Summary

	Pohnpei	Guam*	CNMI*	US*
Substance Use	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
Smoking (within past 30 days)	30.6 (28.4-32.8)	11.9 (19.5-14.8)	10.8 (9.6-12.0)	6.0 (5.0-7.2)
Tobacco chewing (within past 30 days)	22.4 (20.4-24.4)	11.4 (8.8-14.7)	16.1 (14.7-17.5)	3.8 (3.2-4.6)
Alcohol use (within past 30 days)	37.3 (35.0-39.6)	25.3 (21.3-29.8)	26.1 (24.4-27.9)	29.2 (27.3-31.2)
Sexual Health				
Ever had sexual intercourse	38.0 (35.7-40.3)	37.0 (32.1-42.2)	35.8 (34.0-37.8)	38.4 (35.4-41.6)
Did not use condom at last intercourse (among sexually active)	73.5 (68.8-77.8)	58.4 (50.5-65.9)	61.0 (56.8-65.2)	45.7 (43.4-48.0)
Did not use any method to prevent pregnancy at last intercourse (among sexually active)	48.5 (44.6-52.4)	35.7 (28.2-43.9)	27.1 (23.4-31.1)	11.9 (10.3-13.9)
Overweight/obesity				
Had obesity	19.4 (17.6-21.4)	23.8 (20.9-26.9)	21.6 (20.1-23.2)	15.5 (13.8-17.3)
Were overweight	23.0 (21.0-25.0)	18.3 (15.7-21.2)	15.9 (14.5-17.3)	16.1 (14.9-17.5)
Nutrition/PA				
Did not eat fruit in the past 7 days	12.2 (10.7-13.8)	9.6 (7.6-12.0)	5.9 (5.1-6.8)	6.3 (5.4-7.3)
Did not eat vegetables in the past 7 days	17.7 (16.0-19.6)	11.1 (9.2-13.4)	6.9 (6.0-7.9)	7.9 (7.1-8.7)
Drank a sugary drink 2+ times per day	22.6 (20.6-24.6)	12.1 (9.7-14.9)	9.7 (8.7-10.9)	9.3 (7.7-11.2)
Were not physically active at least 60 min per day on 5+ days	73.1 (70.9-75.1)	67.9 (64.1-71.5)	63.5 (61.8-65.3)	55.9 (53.7-58.1)

*Guam, CNMI, and US data from the 2019 YRBS

The aim of this report is to present current prevalence of certain risk factors for developing non-communicable disease (NCD), sexually transmitted infections, and teenage pregnancy among high school youth in Pohnpei. These data can be used to better understand the burden of these risk factors, monitor trends, and determine who is at greatest risk for poor health in order to improve health among Pohnpei youth through the development of targeted evidence-based interventions. The table below compares selected comparable indicators in Pohnpei to Guam, Commonwealth of the Northern Mariana Islands (CNMI), and the United States (US). Green shading represents the location with the “best” prevalence, followed by orange shading, and red shading

Youth Surveillance in Pohnpei

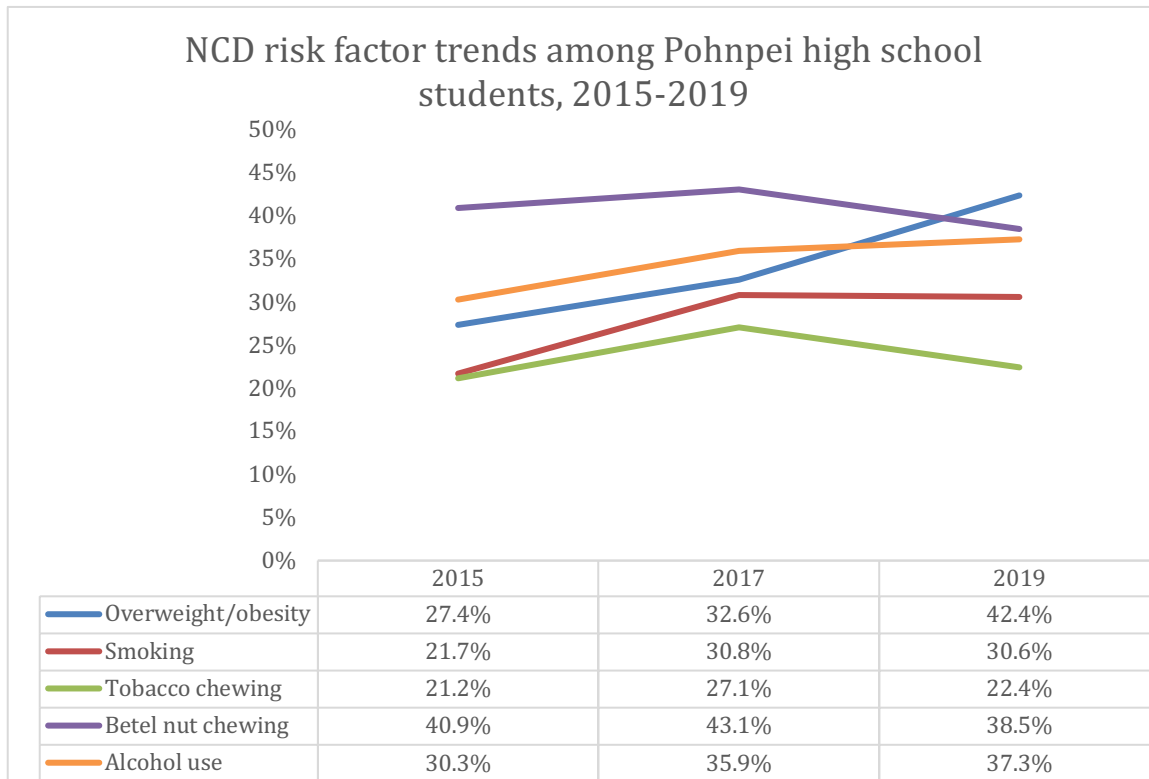
The Rapid Youth High School Survey in Pohnpei can inform us about the current prevalence of key NCD risk factors, as well as tell us about trends. These trends are important because they tell us whether or not our current efforts are effective at improving risk factor indicators among youth.

When we compare the 2017 Pohnpei Rapid High School Survey data to the current 2019 data, we see that there have been significant improvements in betel nut and tobacco chewing. There were no statistically significant changes in smoking, any tobacco use (either smoking and/or chewing), and alcohol use. Additionally, prevalence of overweight/obesity increased significantly from 2017. This suggests that the current efforts to improve betel nut chewing with and without tobacco are successful and should be strengthened. Although smoking and alcohol use did not appear to increase significantly, more effort is needed to reduce these risk factors. The most concerning trend is the drastic increase in overweight/obesity from 2017 to 2019. This suggests that current strategies to address overweight/obesity in youth are not working and should therefore be improved or replaced with more effective, evidence-based strategies.

	2017%	2019%	Comparison*
Smoking (within past 30 days)	30.8	30.6	○
Tobacco chewing (within past 30 days)	27.1	22.4	↓
Betel nut chewing (within past 30 days)	43.1	38.5	↓
Any tobacco use (within past 30 days)	39.4	38.2	○
Alcohol use (within past 30 days)	35.9	37.3	○
Overweight/obesity	32.6	42.4	↑

*Chi-square tests were used to test for statistically significant differences between 2017 and 2019; p-values<0.05 were considered statistically significant; ↑= indicator got significantly worse from 2017 to 2019; ○= indicator showed no significant change from 2017 to 2019; ↓=indicator got significantly better from 2017 to 2019

Youth Surveillance in Pohnpei



The line graph above displays trends of key NCD indicators among Pohnpei youth between 2015-2019. Although there were significant improvements in betel nut and tobacco chewing between 2015 and 2017, there does not appear to be a long-term improvement from 2015. Alcohol use has slowly increased from 2015 to 2019, and smoking has increased overall from 2015 to 2019. However, the most alarming increase was overweight/obesity prevalence that increased from 27.4% in 2015 to 42.4% in 2019.

Background

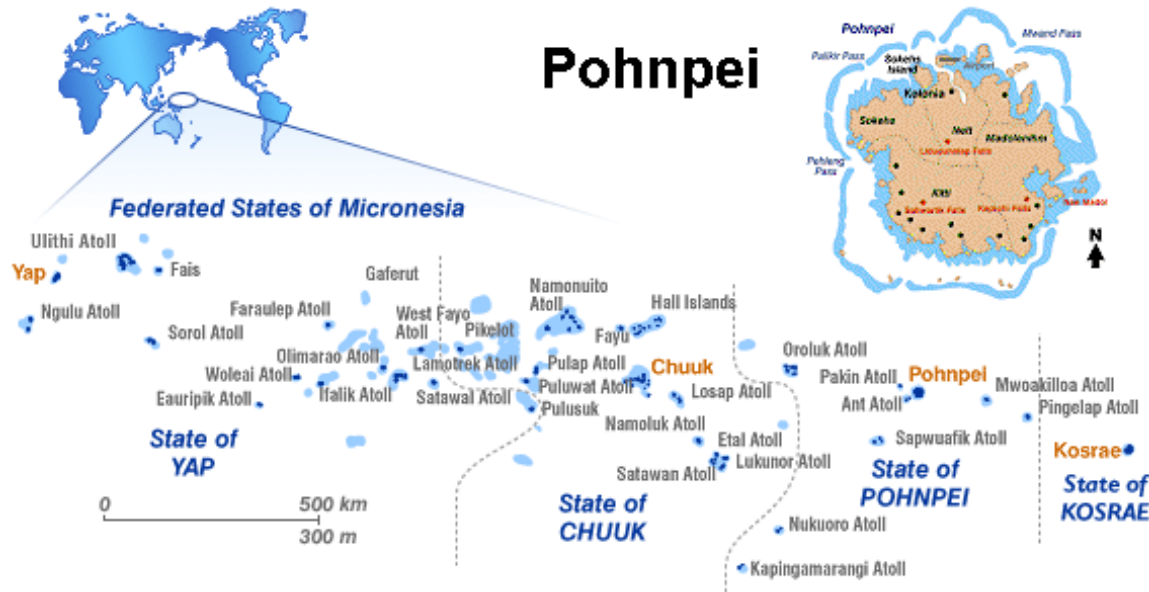


Figure 1. Map of Pohnpei

<https://scubadivingresource.com/destinations/pacific-south-pacific/micronesia/pohnpei/>

Pohnpei is one of the four states of the Federated States of Micronesia (FSM) located in the Pacific Ocean east of the Philippines. Pohnpei is made up of one main island with many small surrounding islets and atolls. The total land area of Pohnpei is 129 square miles. As of 2010, the total population of Pohnpei was 36,196, making it the second most populated state in FSM.

In 2013, Pohnpei State declared a State of Health Emergency due to the epidemic of non-communicable diseases (NCDs). This is largely due to loss of longevity, quality of life, and loss of workforce productivity due to NCDs. There has been a shift away from traditional lifestyle and foods that negatively impacts the culture and health of Pohnpeians. The majority of the adult population in Pohnpei is now overweight or obese and about one-third of adults smoke tobacco and about one-third of adults chew betel nut.

In 2010, the Pacific Island Health Officers' Association (PIHOA) declared a regional health emergency due to the epidemic of NCDs in the US-Affiliated Pacific Islands (USAPI). The USAPI include American Samoa, Commonwealth of the Mariana Islands (CNMI), Guam, Federated States of Micronesia (FSM), Republic of Palau, and Republic of the Marshall Islands. Stemming from this regional declaration of emergency, all six of these USAPI agreed upon a regional NCD surveillance framework that includes core NCD and risk factor indicators that need to be routinely and consistently collected across the region in order to monitor the progress of local and regional NCD responses. This includes the following core youth indicators to be measured among high school youth every two years: 30-day tobacco smoking, 30-day tobacco chewing, 30-day alcohol use, and overweight/obesity (by physical measurement of height and weight). Therefore, Pohnpei adopted the Pohnpei Rapid Youth High School Survey beginning in 2015 to be implemented biannually.

Methodology

The Pohnpei Rapid Youth High School Survey was developed by the Pohnpei State Department of Health Services with assistance from PIHOA (see Annex for copy of the survey). This survey instrument originally contained only core youth NCD indicators (30-day smoking, tobacco chewing, betel nut chewing, and alcohol use and overweight/obesity) in 2015, but expanded in 2017 to also include blood pressure measurement, additional alcohol questions, and reproductive health indicators. Then, in 2019, questions on nutrition and physical activity were also added. The Pohnpei Rapid High School Youth Survey was conducted in all high schools (both public and private) in Pohnpei. All students in grades 9-12 present on the survey day were eligible to participate in the survey.

The Pohnpei Department of Health Services (Pohnpei DHS) staff conducted this survey at each school during semester two of the 2019-2020 school year. Prior to data collection, all staff were trained on survey administration to include physical measurements of height, weight, and blood pressure. Pohnpei DHS staff first recorded demographic information of each student in Section 1 of the paper survey form, then took height, weight, and blood pressure measurements of the student and also recorded these in Section 1. Section 2 of the paper survey form was then completed by students confidentially and turned in anonymously to collect information on substance use, nutrition/physical activity, and reproductive health behaviors. Afterwards, Pohnpei DHS staff entered the paper surveys into a Microsoft Excel database. PIHOA provided technical support for cleaning and analyzing these data.

Data on substance use, nutrition/physical activity, reproductive health behaviors are all based on self-report. Measured height and weight were used to calculate Body Mass Index (BMI). BMI percentiles were used to determine BMI categories for those students under 17 years old. Adult BMI calculations were used for those students 18 and older. Overall, all students were classified as underweight, healthy, overweight, or obese. Two blood pressure measurements were conducted on each student, and the average of these two measurements were used to classify each student as normal (<120/80), prehypertensive (120/80-139/89), or hypertensive (140/90 or higher).

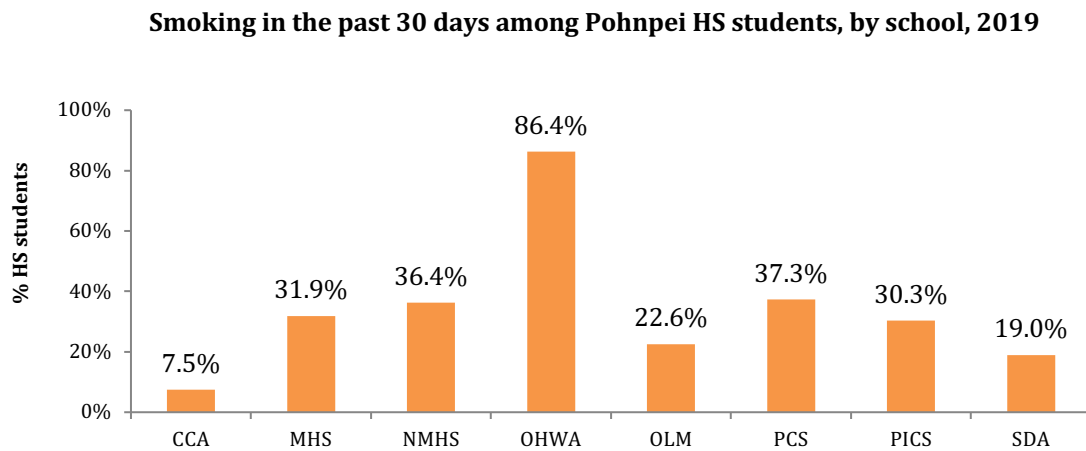
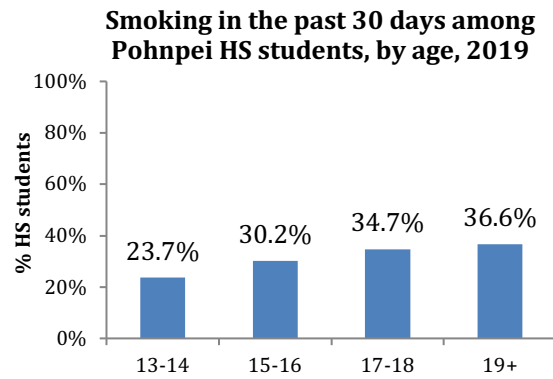
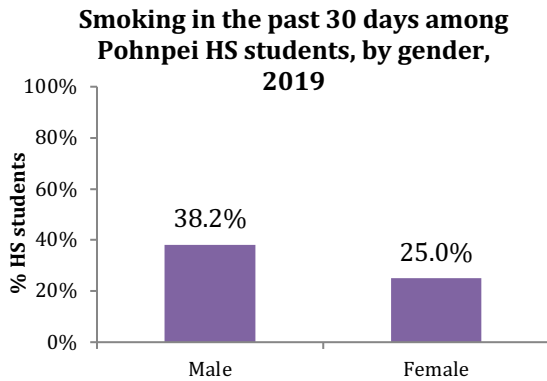
Sample Characteristics (N=1726)

<u>Demographic Characteristics</u>	N	%
Gender		
Male	731	42.4%
Female	995	57.6%
Age*		
13-14	329	19.1%
15-16	812	47.1%
17-18	513	29.7%
19+	71	4.1%
Grade		
9	506	29.3%
10	423	24.5%
11	392	22.7%
12	405	23.5%
School		
CCA	80	4.1%
MHS	273	14.0%
NMHS	319	16.4%
OHWA	22	1.1%
OLM	115	5.9%
PCS	102	5.2%
PICS	715	36.7%
SDA	100	5.1%
Total	1726	100.0%

*One student was missing age data

Smoking

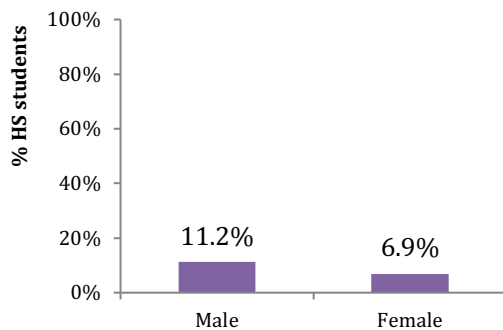
30.6% of high school students in Pohnpei are current smokers (smoked in the past 30 days). Male students have a higher smoking prevalence than female students (38.2% vs. 25.0%). Additionally, smoking prevalence increases with age, with the prevalence increasing from ages 13-14 (23.7%) to ages 19+ (36.6%). There also appears to be a lot of variation in smoking prevalence between schools ranging from 7.5% (CCA) to 86.4% (OHWA).



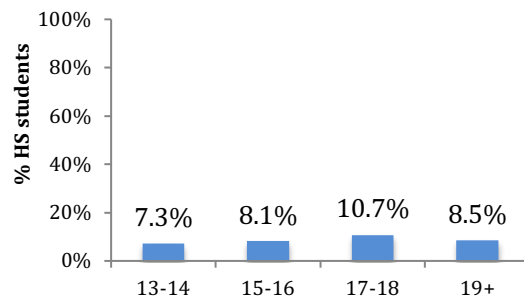
E-Cigarette Use

8.7% of high school students in Pohnpei are current e-cigarette users (used e-cigarettes in the past 30 days). Male students have a higher e-cigarette use prevalence than female students (11.2% vs. 6.9%). E-cigarette use prevalence is highest among the 17-18 age group at 10.7%. E-cigarette use prevalence varies by school with similar trends to smoking with the lowest prevalence at CCA (1.3%) and the highest prevalence at OHWA (22.7%).

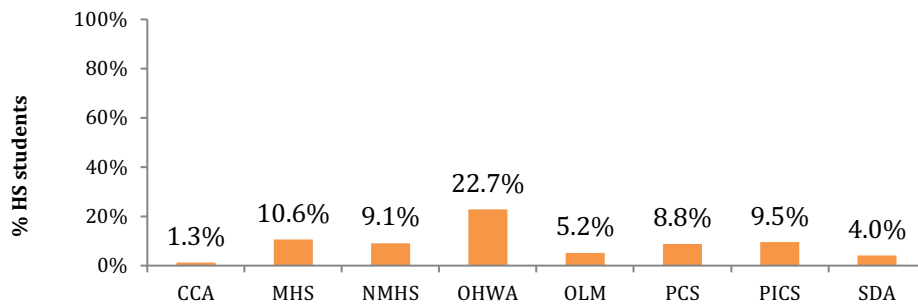
E-cigarette use in the past 30 days among Pohnpei HS students, by gender, 2019



E-cigarette use in the past 30 days among Pohnpei HS students, by age, 2019



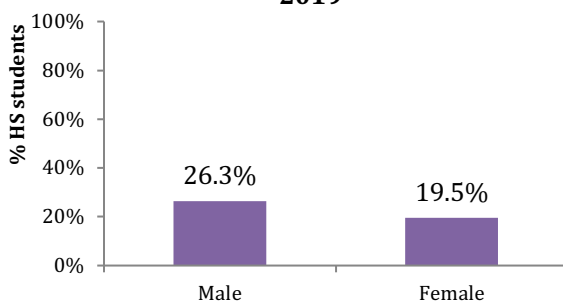
E-cigarette use in the past 30 days among Pohnpei HS students, by school, 2019



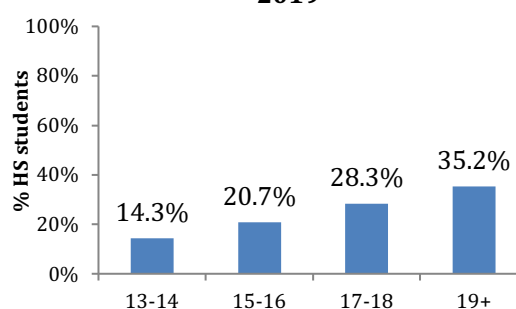
Tobacco Chewing

22.4% of high school students in Pohnpei are current tobacco chewers (chewed tobacco in the past 30 days). This includes chewing tobacco with or without betel nut. Male students have a higher tobacco chewing prevalence than female students (26.3% vs. 19.5%). Tobacco chewing prevalence increases with age, more than doubling from ages 13-14 (14.3%) to ages 19+ (35.2%). Tobacco chewing prevalence varies by school with similar trends to smoking with the lowest prevalence at CCA (3.8%) and the highest prevalence at OHWA (45.5%).

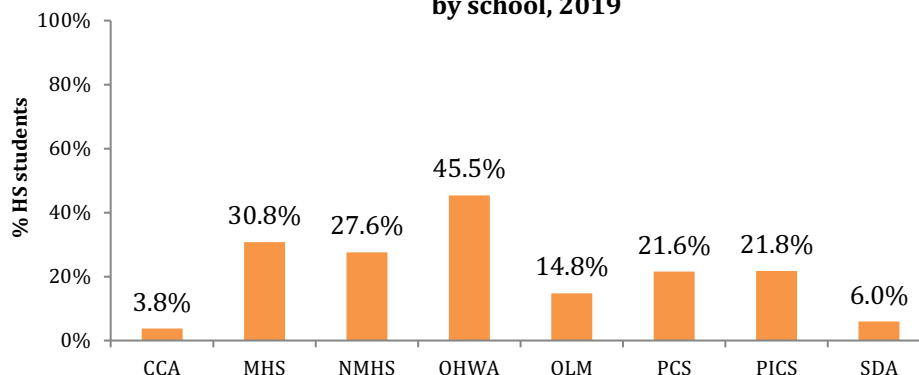
**Tobacco chewing in the past 30 days
among Pohnpei HS students, by gender,
2019**



**Tobacco chewing in the past 30 days
among Pohnpei HS students, by age
2019**



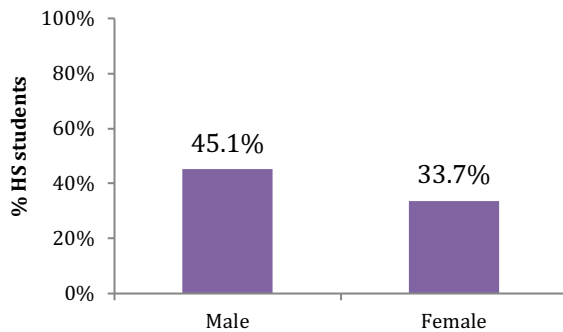
**Tobacco chewing in the past 30 days among Pohnpei HS students,
by school, 2019**



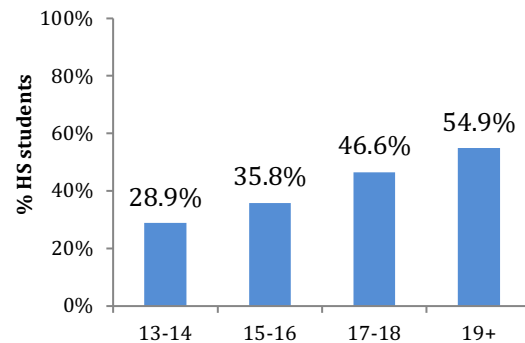
Betel Nut Chewing

More than one-third (38.5%) of high school students in Pohnpei are current betel nut chewers (chewed betel nut in the past 30 days). Betel nut chewing prevalence is higher among male students (45.1%) compared to female students (33.7%). Betel nut chewing prevalence also increases with age like tobacco use, almost doubling from ages 13-14 (28.9%) to ages 19+ (54.9%). Variation between schools is similar to that observed with tobacco use, ranging from 3.8% at CCA to 72.7% at OHWA.

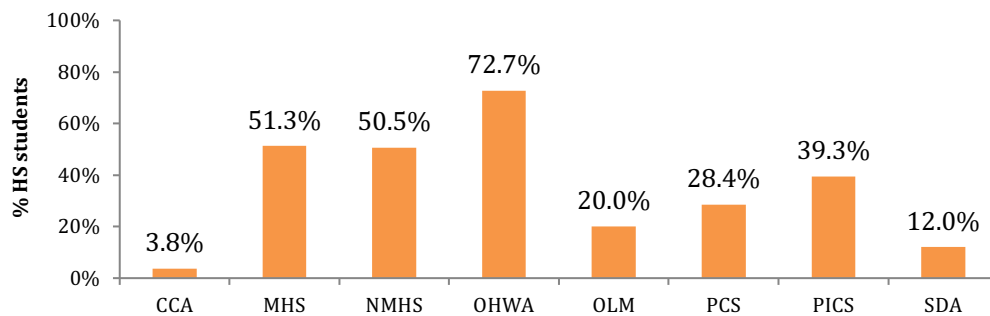
Betel nut chewing in the past 30 days among Pohnpei HS students, by gender, 2019



Betel nut chewing in the past 30 days among Pohnpei HS students, by age, 2019



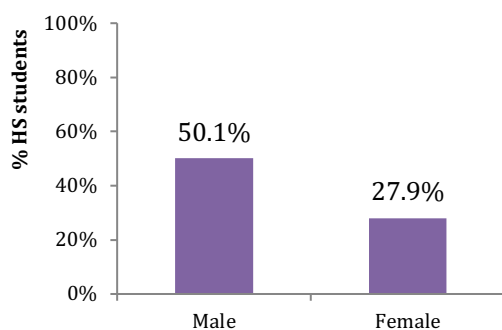
Betel nut chewing in the past 30 days among Pohnpei HS students, by school, 2019



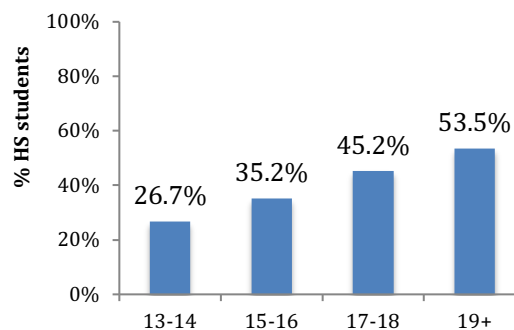
Alcohol Use

Over one-third (37.3%) of high school students in Pohnpei have used alcohol in the past 30 days. Alcohol use prevalence is higher among male students (50.1%) compared to female students (27.9%). Like other substances, prevalence increases with age, doubling from ages 13-14 (26.7%) to ages 19+ (53.5%). Patterns of alcohol use by school are similar to tobacco and betel nut use. Alcohol use prevalence is lowest at CCA (13.8%) and highest at OHWA (68.2%).

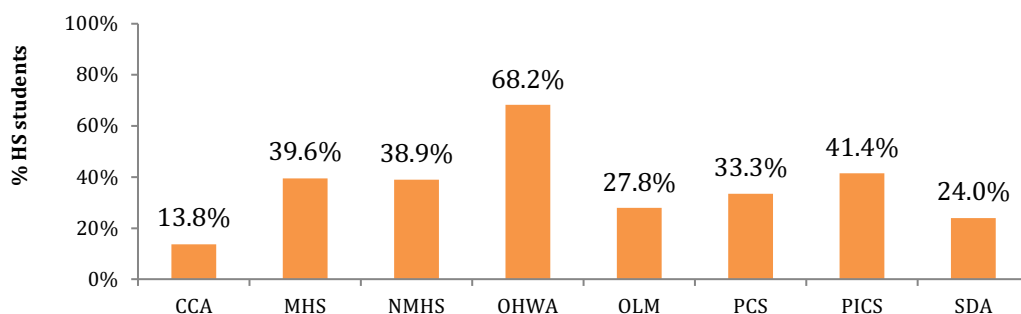
**Alcohol use in the past 30 days
among Pohnpei HS students, by
gender, 2019**



**Alcohol use in the past 30 days
among Pohnpei HS students, by
age, 2019**



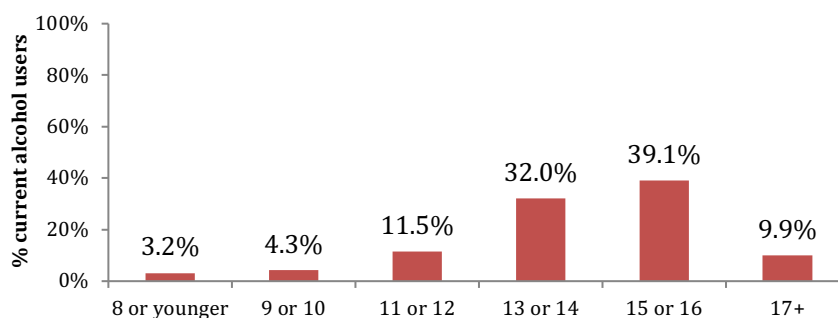
**Alcohol use in the past 30 days among Pohnpei HS students, by
school, 2019**



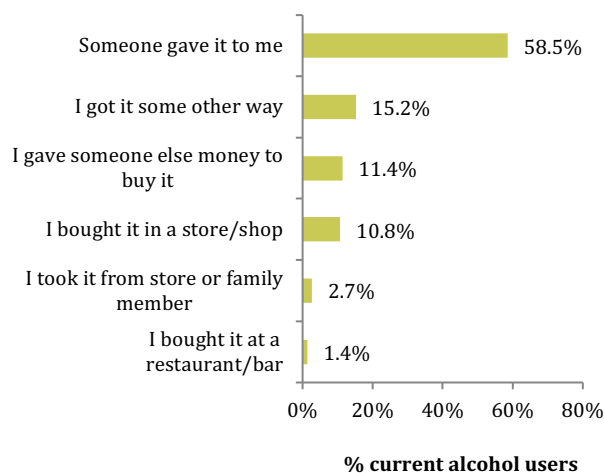
Alcohol Use

The majority (71.1%) of Pohnpei high school students first tried alcohol between the ages of 13 to 16, although 19.0% first tried alcohol at 12 or younger. Over half (58.5%) of high school students in Pohnpei got their alcohol from someone, and another 11.4% gave someone money to buy it for them. Three-quarters of Pohnpei high school students (74.0%) had their first drink of alcohol with friends.

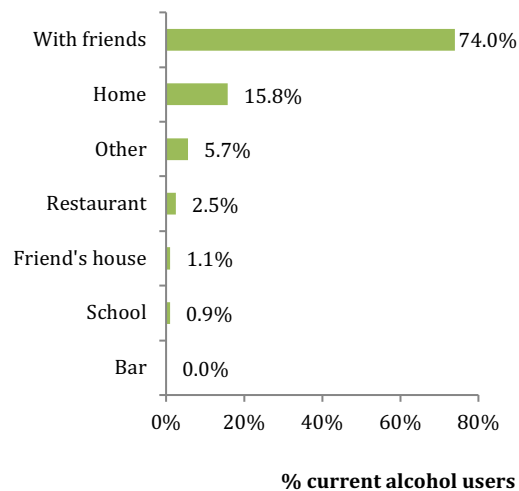
Age first tried alcohol among Pohnpei HS alcohol users, 2019



Where Pohnpei HS current alcohol users usually get their alcohol, 2019



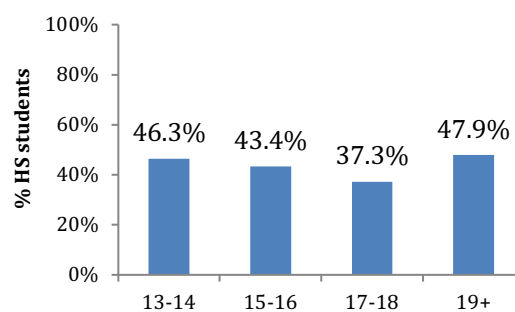
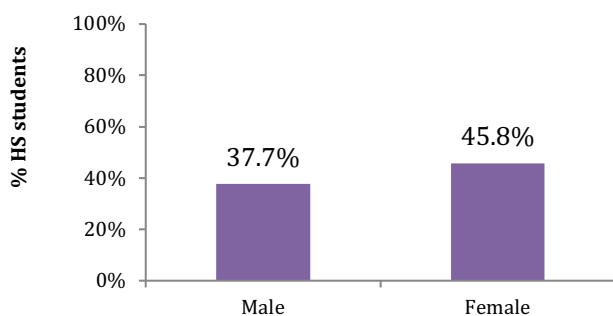
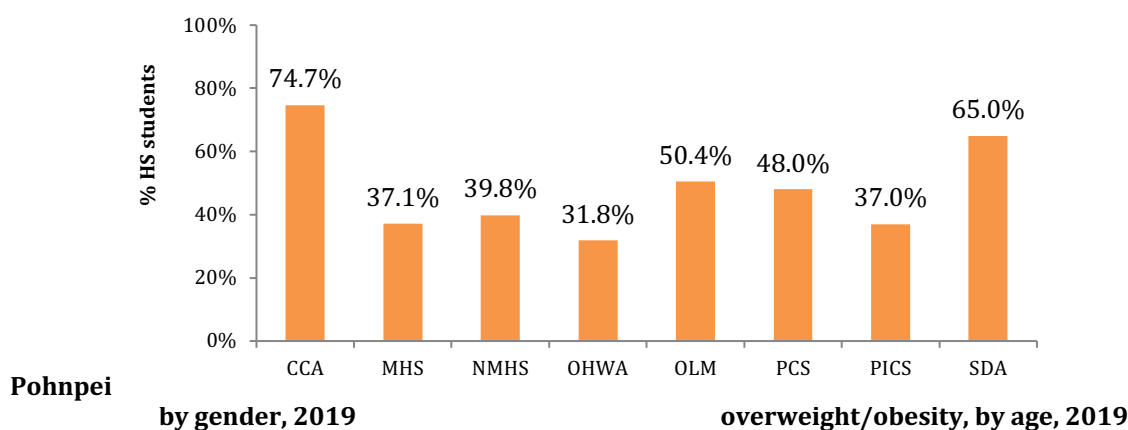
Where Pohnpei HS alcohol users had their first drink, 2019



Overweight/Obesity

One-third (42.4%) of high school students in Pohnpei are overweight or obese. Prevalence of overweight/obesity is higher among female students (45.8%) compared to male students (37.7%). Overweight/obesity is high among all age groups. The schools that had the lowest substance use prevalence had the highest overweight obesity prevalence (CCA=74.7%; SDA=65.0%).

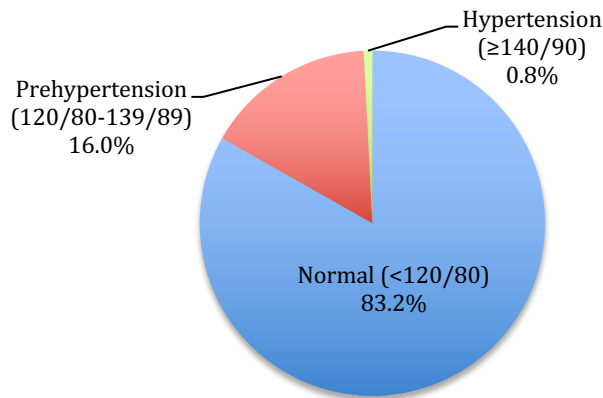
Pohnpei HS student overweight/obesity, by school, 2019



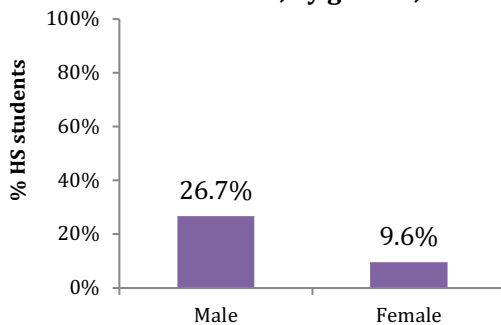
Blood Pressure

Less than 1% of high school students in Pohnpei had a blood pressure (BP) that indicated hypertension (HTN) (BP=140/90 or higher) but 16.0% had a BP that indicated prehypertension (pre-HTN) (BP=120/80-139/89). Prevalence of HTN/pre-HTN is higher among male students (26.7%) compared to female students (9.6%). There is a clear trend of HTN/pre-HTN prevalence with age. Among students 19 years and older, almost one out of four (22.5%) have HTN or pre-HTN. The school with the highest HTN/pre-HTN prevalence is OHWA at 31.8%, which also has a high prevalence of tobacco use.

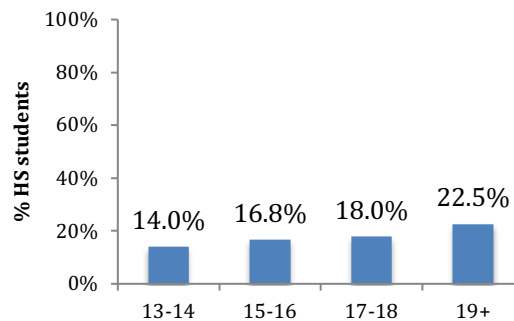
Blood Pressure Categories among Pohnpei HS students, 2019



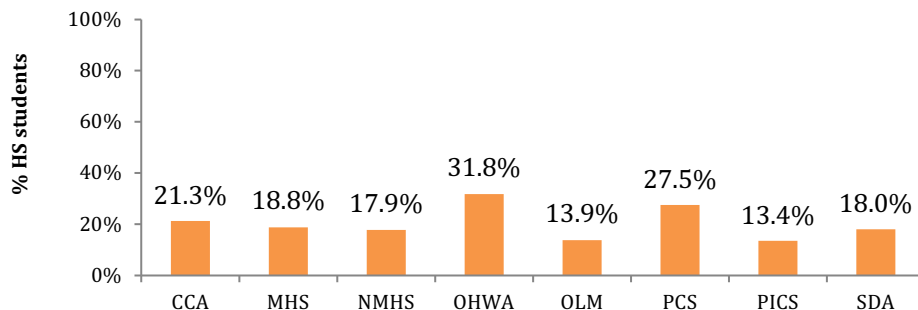
HTN/pre-HTN among Pohnpei HS students, by gender, 2019



HTN/pre-HTN among Pohnpei HS students, by age, 2019



HTN/pre-HTN among Pohnpei HS students, by school, 2019



Reproductive Health

Over one-third (38.0%) of high school students in Pohnpei are sexually active. Two-thirds (63.5%) of the sexually active students report two or more lifetime sexual partners. Only 22.6% of sexually active students reported using a condom at last intercourse. Almost half (48.5%) of sexually active students reported using no method to prevent pregnancy at last intercourse, and another 23.1% were not sure if they did. More effective methods to prevent pregnancy (such as birth control pills, IUD/implants, shot/patch/ring) were uncommon.

<u>Reproductive Health Factors</u>	N	%
Ever had sexual intercourse*		
Yes	653	38.0%
No	1067	62.0%
Number of sexual partners**		
1 person	237	36.5%
2 people	132	20.3%
3 people	91	14.0%
4 people	57	8.8%
5 people	25	3.8%
6 or more people	108	16.6%
Condom use during last intercourse**		
Yes	147	22.6%
No	503	77.4%
Method used to prevent pregnancy during last intercourse**		
No method used	315	48.5%
Birth control pills	24	3.7%
Condoms	126	19.4%
IUD or implant	0	0.0%
Shot, patch, or birth control ring	8	1.2%
Withdrawal or some other method	27	4.2%
Not sure	150	23.1%

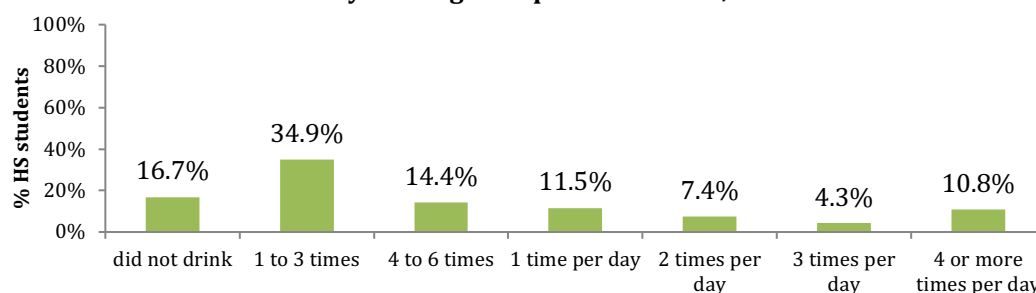
*6 students missing data on sexual intercourse

**3 students missing data on number of sexual partners, condom use, and birth control use

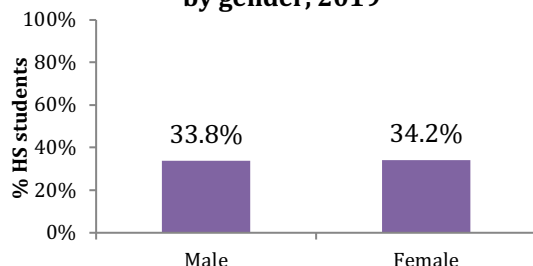
Nutrition: Sugar Sweetened Beverages (SSBs)

The majority (83.3%) of high school students in Pohnpei consumed sugar sweetened beverages (SSBs) in the past 7 days. About one-third (34.0%) of high school students consumed SSBs at least once per day in the past 7 days. Daily SSB consumption was similar among males and females. Daily SSB consumption was highest among those 19 and older (49.3%). Daily SSB consumption varies by school ranging from 18.8% at CCA to 54.5% at OHWA.

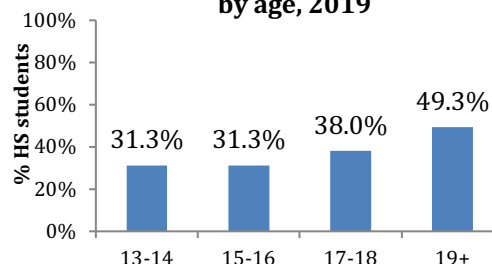
How often sugar sweetened beverages were consumed in the past 7 days among Pohnpei HS students, 2019



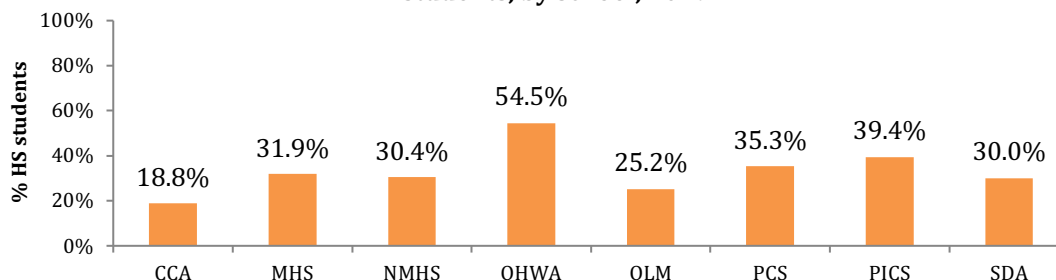
Consuming SSBs at least once per day among Pohnpei HS students, by gender, 2019



Drinking SSBs at least once per day among Pohnpei HS students, by age, 2019



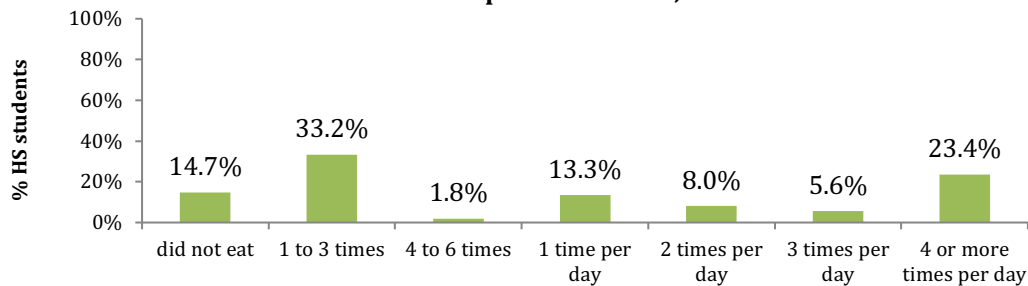
Drinking SSBs at least once per day in the past 7 days among Pohnpei HS students, by school, 2019



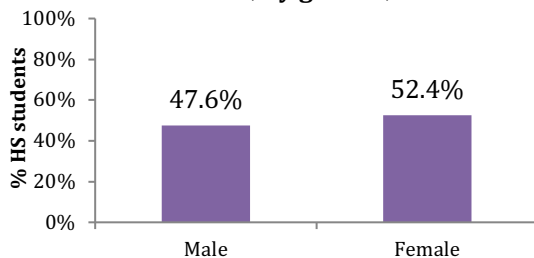
Nutrition: Instant Noodles

The majority (85.3%) of high school students in Pohnpei consumed instant noodles in the past 7 days. About half (50.3%) of high school students consumed instant noodles at least once per day in the past 7 days. Daily instant noodle consumption was similar among males (47.6%) and females (52.4%). Daily instant noodle consumption was highest among those 19 and older (62.0%). Daily instant noodle consumption varies by school ranging from 26.3% at CCA to 63.6% at OHWA.

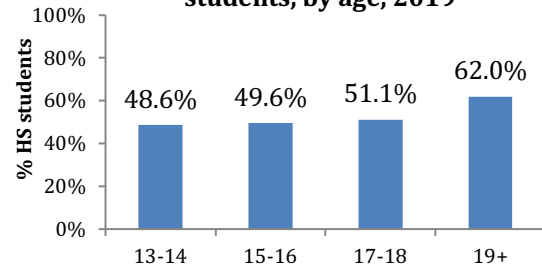
How often instant noodles were eaten in the past 7 days among Pohnpei HS students, 2019



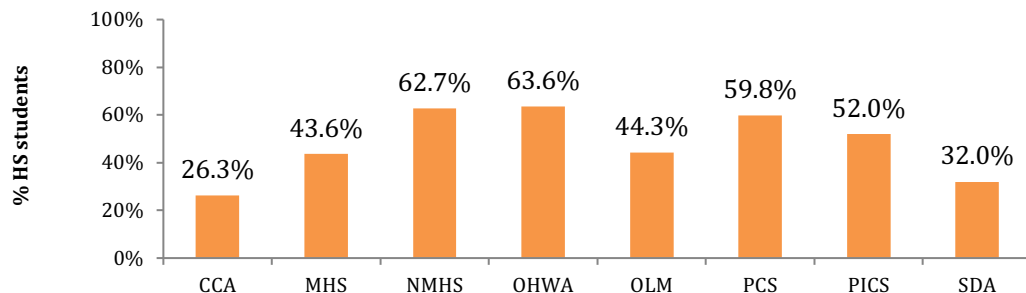
Consuming instant noodles at least once per day among Pohnpei HS students, by gender, 2019



Eating instant noodles at least once per day among Pohnpei HS students, by age, 2019



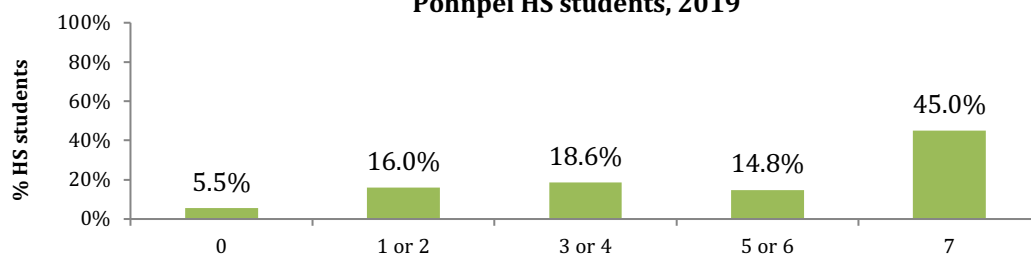
Eating instant noodles at least once per day among Pohnpei HS students, by school, 2019



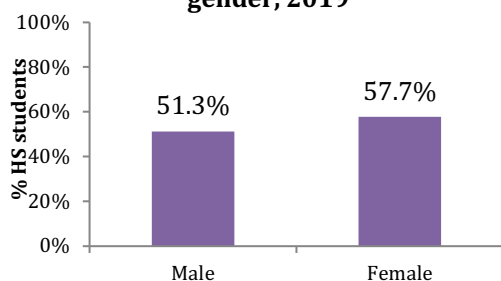
Nutrition: Eating Breakfast

Fewer than half (45.0%) of high school students in Pohnpei ate breakfast every day in the past 7 days. Female high school students had a higher prevalence (57.7%) of not eating breakfast daily compared to males (51.3%). Not eating breakfast daily prevalence was highest among those students 17-18 years old at 58.9%. There was variation in not eating breakfast daily prevalence by school ranging from 31.8% at OHWA to 66.7% at PCS.

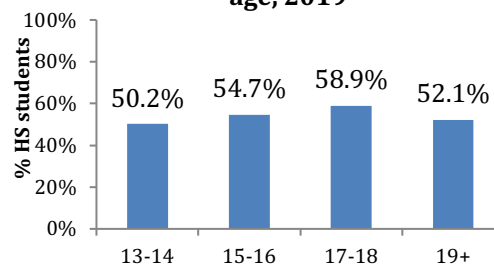
How many days breakfast was eaten in the past 7 days among Pohnpei HS students, 2019



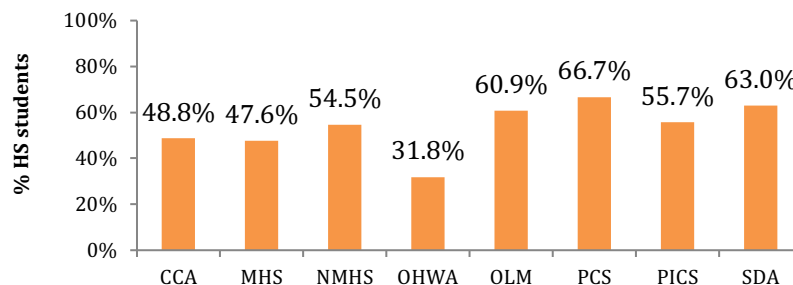
NOT eating breakfast every day among Pohnpei HS students, by gender, 2019



NOT eating breakfast every day among Pohnpei HS students, by age, 2019



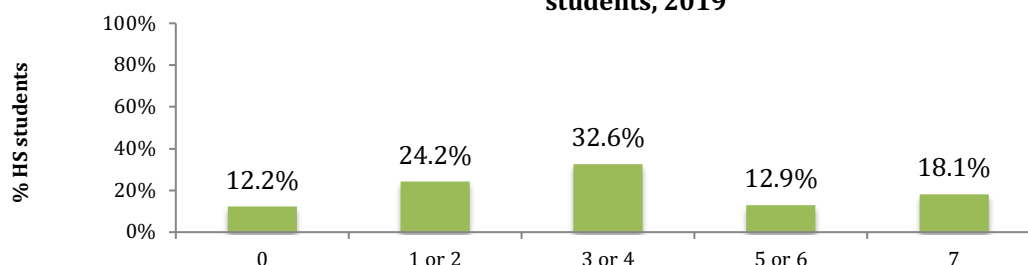
NOT eating breakfast every day among Pohnpei HS students, by school, 2019



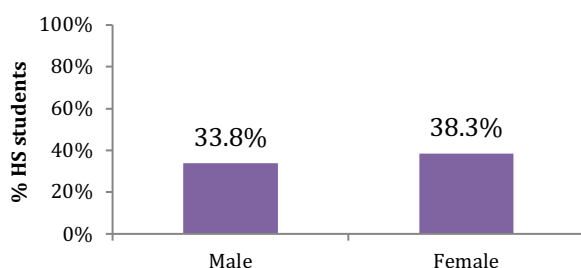
Nutrition: Fruit

Only 18.1% of Pohnpei high school students eat fruit every day. Over one-third (36.4%) of high school students in Pohnpei eat fruit 0 to 2 days per week. Female high school students had a higher prevalence of low fruit consumption (38.3%) compared to male students (33.8%). Low fruit consumption was highest among those high school students 19 and older at 74.6%. There was variation in low fruit consumption prevalence by school ranging from 21.9% at NMHS to 50.0% at CCA.

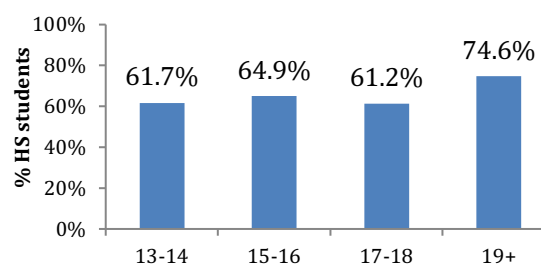
How many days fruit was eaten in past 7 days among Pohnpei HS students, 2019



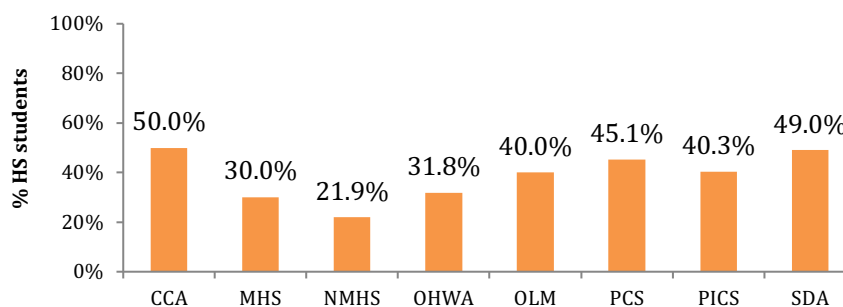
Eating fruit <3 days per week among Pohnpei HS students, by gender, 2019



Eating fruit <3 days per week among Pohnpei HS students, by age, 2019



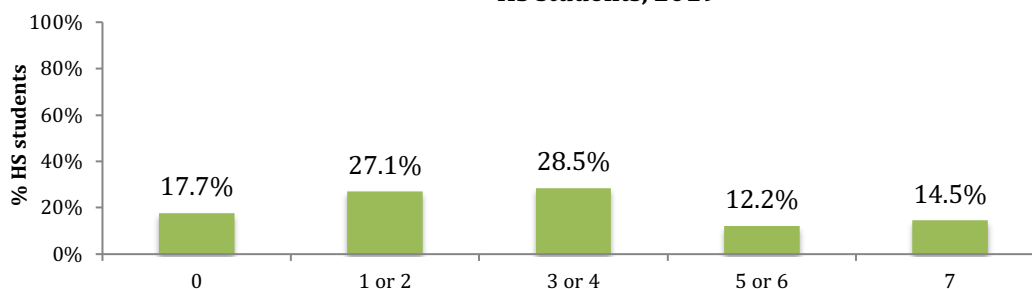
Eating fruit <3 days per week among Pohnpei HS students, by school, 2019



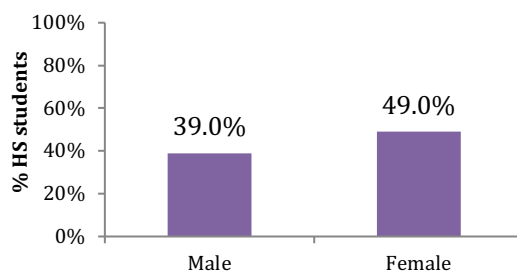
Nutrition: Vegetables

Only 14.5% of Pohnpei high school students eat fruit every day. Almost half (44.8%) of high school students in Pohnpei eat vegetables 0 to 2 days per week. Female high school students had a higher prevalence of low vegetable consumption (49.0%) compared to male students (39.0%). Low vegetable consumption was highest among those high school students 13-14 years old at 49.5%. There was variation in low vegetable consumption prevalence by school ranging from 22.7% at OHWA to 52.0% at PCS.

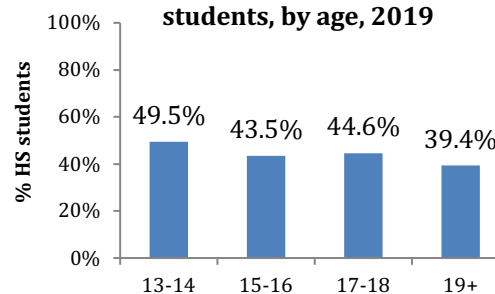
How many days vegetables were eaten in past 7 days among Pohnpei HS students, 2019



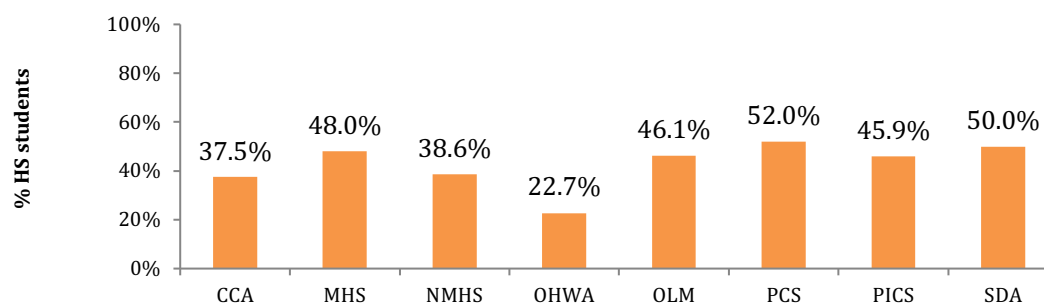
Eating vegetables <3 days per week among Pohnpei HS students, by gender, 2019



Eating vegetables <3 days per week among Pohnpei HS students, by age, 2019

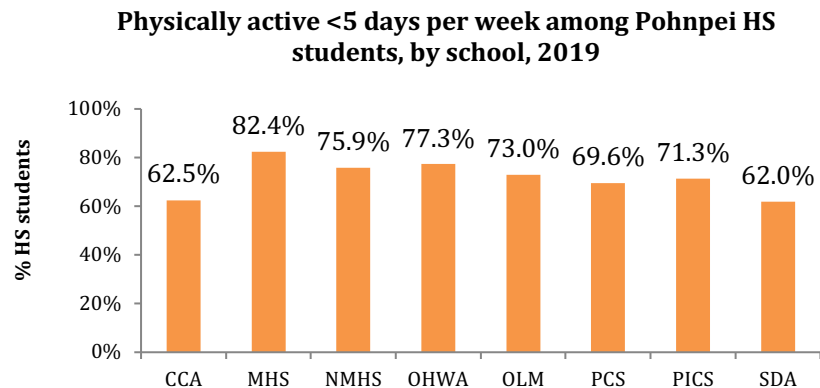
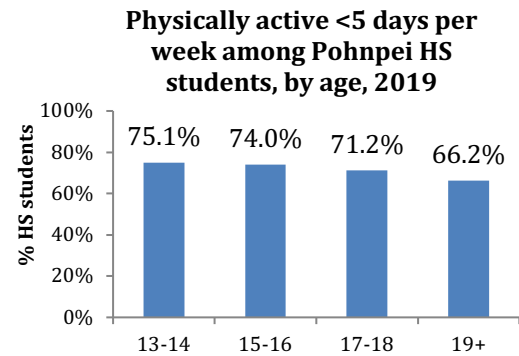
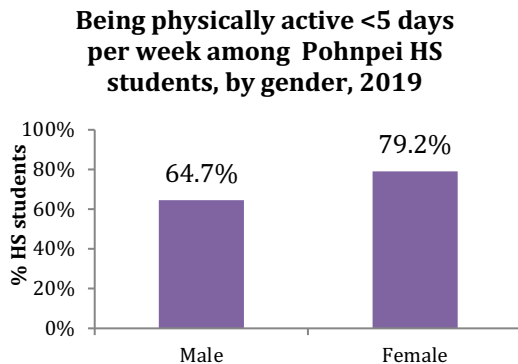
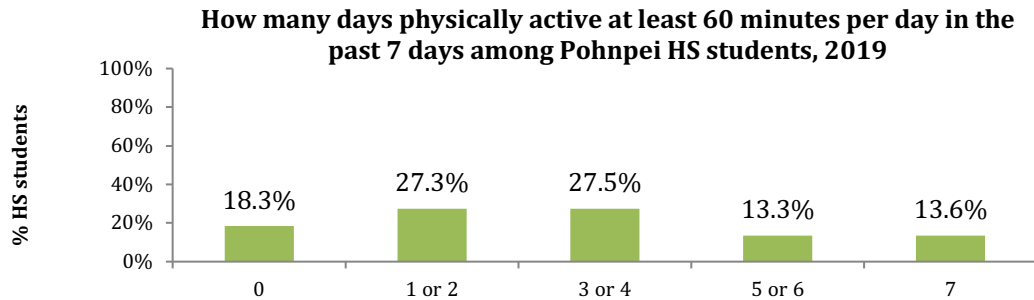


Eating vegetables <3 days per week, by school, 2019



Physical Activity

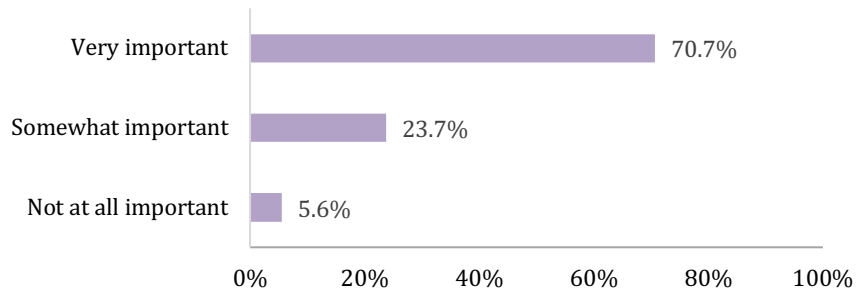
Only 26.9% of Pohnpei high school students are physically active 5 or more days (at least 60 minutes per day) per week. Almost one out of five students (18.3%) did not participate in any physical activity in the past 7 days. Female high school students had a higher prevalence of low physical activity (79.2%) compared to male students (64.7%). Low physical activity was highest among those high school students 13-14 years old at 75.1%. There was variation in low physical activity prevalence by school ranging from 62.0% at SDA to 82.4% at PCS.



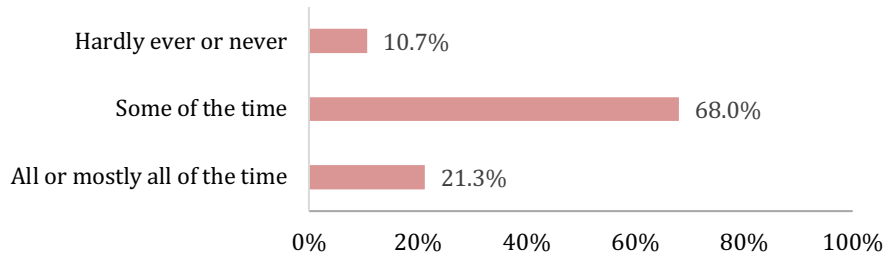
Healthy Food

The majority of Pohnpei high school students (70.7%) reported they felt that eating healthy food was very important. Most Pohnpei high school students (68.0%) reported that they think about how healthy food before eating.

Importance of eating healthy food among
Pohnpei HS students, 2019



Frequency of thinking about how healthy
food is before eating among Pohnpei HS
students, 2019



Discussion

Based on the data presented in this report, it is clear that many risk factors are highly prevalent among youth in Pohnpei and some of these risk factors are getting worse. This indicates a great need to evaluate current efforts in order to develop more effective, evidence-based school programs.

Tobacco use through smoking and chewing (with betel nut) is a significant concern given that these prevalence rates are much higher than other jurisdictions in the region and **two out of five high school youth are using tobacco**. Additionally, **over one-third of high school youth in Pohnpei are using alcohol**. There are clear trends in these use patterns, highlighting the need to prioritize certain high schools in Pohnpei for intervention. Additionally, substance use begins early in Pohnpei, so interventions in youth prior to high school should be considered.

Two out of five high school youth in Pohnpei are overweight or obese and one out of five already have hypertension or pre-hypertension. Among students 19 and older, almost half are overweight or obese. Due to the fact that youth who are overweight or obese in adolescence are more likely to be overweight or obese in adulthood compared to healthy weight adolescents, it is important to prevent overweight/obesity in high school students.

Daily consumption of sugar sweetened beverages (34%) and instant noodles (50%) is higher than daily consumption prevalence of fruit (18%) and vegetables (15%). Additionally, only one out of four youth in Pohnpei get the recommended amount of physical activity. Physical activity programs in schools, sports programs, school nutrition, and healthy school food policies are effective ways to prevent overweight/obesity among youth.

Almost half of high school students in Pohnpei are sexually active. **Few students regularly use condoms, and only about one-quarter are using methods to prevent pregnancy.** Effective modern methods such as birth control pills, implants, IUDs, and Depo are highly under-utilized by students. Education about and access to methods to prevent sexually transmitted infections and teenage pregnancy are greatly needed among high schools in Pohnpei.

Recommendations

Overall, the Pohnpei Rapid High School Survey continues to collect much needed data from Pohnpei high school youth. It is highly recommended that **this survey continues to be conducted on a regular, biannual basis.**

High school programs around substance use, nutrition, physical activity, and reproductive health should be strategically evaluated. Additionally, Pohnpei State and FSM National policies regarding these topics should also be reviewed. These data can be a powerful asset to motivate higher level change, especially regarding tobacco, alcohol, and unhealthy food legislation that potential to greatly reduce risk factor prevalence among youth in Pohnpei. **Without high-impact action, these risk factors will continue to rise** among youth, and continue into adulthood, resulting in high adult risk factor and disease prevalence that greatly contribute to morbidity and mortality in Pohnpei and burden the healthcare system.

Acknowledgements

FSM National Department of Health and Social Affairs

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- Primary Health Care Program Coordinators and Staffs

Pohnpei State Department of Education

- Director of Education
- Pohnpei Island Central School
 - Principal, staff, and students
- Madolenihmw High School
 - Principal, staff, and students
- Nanpei Memorial High School
 - Principal, staff, and students

Private High Schools

- Seventh Day Adventist
 - Principal, staff, and students
- Calvary Christian Academy
 - Principal, staff, and students
- OHWA International Christian Academy
 - Principal, staff, and students
- Our Lady of Mercy Catholic High School
 - Principal, staff, and students

Pacific Islands Health Officers' Association

Annex

Students will first be interviewed and measured by trained Survey Staff to complete questions 1-15 in the shaded box. Then, students will complete questions independently, and then submit forms into a designated box. **No names are to be collected.**

SECTION 1: To be completed by NCD Survey Staff:

1. Date (M/D/Y):	____/____/____
2. Name of School:	_____
3. Grade:	9 10 11 12 (circle one)
4. Name of Class or Section:	_____
5. Gender:	Male Female (circle one)
6. Age (years)	_____ years
7. Residence (Municipality):	_____
8. Staff Member Initials:	_____

9. Height:	_____ inches
10. Weight:	_____ pounds
11. Blood Pressure Reading 1	_____ / _____
12. Blood Pressure Reading 2	_____ / _____
13. Blood Pressure Reading 3	_____ / _____
14. Blood Pressure Reading AVG	_____ / _____
15. Staff Member Initials:	_____

This section is for the student to complete (Do not put your name on this sheet. All information is confidential.)

16. During the **past 30 days**, did you **smoke** any tobacco? (circle one) **Yes No**

17. During the **past 30 days**, did you chew **at least one betel nut**? (circle one) **Yes No**

18. During the **past 30 days** did you **chew** any tobacco with or without betelnut)?
(circle one) **Yes No**

19. During the past 30 days did you **use any electronic vapor products including e-cigarettes, vapes, vape pens, e-cigars, ehookahs, hookah pens, and mods.**
(circle one) **Yes No**

20. During the **past 30 days**, did you have **at least one drink of alcohol**?
(circle one) **Yes No**

21. During the past 30 days, how did you **usually** get the alcohol you drank? (circle one)

(a) I did not drink alcohol during the past 30 days

(b) I bought it in a store or shop

(c) I bought it at a restaurant or bar

(d) I gave someone else money to buy it for me

(e) Someone gave it to me

(f) I took it from a store or family member

(g) I got it some other way

22. During the past 30 days, on how many days did you have 4 or more drinks of alcohol in a row, that is within a couple of hours (if you are **female**) or 5 or more drinks of alcohol in a row, that is, within a couple of hours (if you are **male**)? (circle one)

(a) 0 days

(b) 1 day

(c) 2 days

(d) 3 to 5 days

(e) 6 to 9 days

(f) 10 to 19 days

(g) 20 or more days

23. How old were you when you had your **first drink of alcohol other than a few sips**? (circle one)

- (a) I have never had a drink of alcohol other than a few sips
- (b) 8 years old or younger
- (c) 9 or 10 years old
- (d) 11 or 12 years old
- (e) 13 or 14 years old
- (f) 15 or 16 years old
- (g) 17 years old or older

24. Where did you have your **first drink of alcohol beverage other than a few sips**? (circle one)

- (a) I have never had a drink of alcohol other than a few sips
- (b) Restaurant
- (c) Home
- (d) School
- (e) Bar
- (f) With friends
- (g) Friend's house
- (h) Other: _____ (please fill in if other)

25. During the past 7 days, how many times did you **drink a can, bottle, or glass of soda, such as Coke, Pepsi, or Sprite?** (Do not count diet soda or diet pop.) (circle one)

- (a) I did not drink soda during the past 7 days
- (b) 1 to 3 times during the past 7 days
- (c) 4 to 6 times during the past 7 days
- (d) 1 time per day
- (e) 2 times per day
- (f) 3 times per day
- (g) 4 or more times per day

26. During the past 7 days, how many times did you **eat instant noodles (raw or cooked)?** (circle one)

- (a) I did not eat instant noodles during the past 7 days
- (b) 1 to 3 times during the past 7 days
- (c) 4 to 6 times during the past 7 days
- (d) 1 time per day
- (e) 2 times per day
- (f) 3 or more times per day

27. During the past 7 days, on how many days did you eat fruit? (circle one)

0 1 2 3 4 5 6 7

28. During the past 7 days, on how many days did you eat vegetables? (circle one)

0 1 2 3 4 5 6 7

29. During the past 7 days, on how many days did you eat breakfast? (circle one)

0 1 2 3 4 5 6 7

30. During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.) (circle one)

0 1 2 3 4 5 6 7

31. Before you eat, how often do you think about how healthy your food is?

- (a) All or mostly all of the time
- (b) Some of the time
- (c) Hardly ever or never

32. How important is eating healthy food to you?

- (a) Not at all important
- (b) Somewhat important
- (c) Very important

33. Have you ever had sexual intercourse? Yes No (circle one) **IF NO, STOP HERE!**

34. **How old** were you when you had **sexual intercourse for the first time?** (circle one)

- (a) I have never had sexual intercourse
- (b) 11 years old or younger
- (c) 12 years old
- (d) 13 years old
- (e) 14 years old
- (f) 15 years old
- (g) 16 years old
- (h) 17 years old or older

35. During your life, with how many people have you had sexual intercourse?

- (a) 1 person
- (b) 2 people
- (c) 3 people
- (d) 4 people
- (e) 5 people
- (f) 6 or more people

36. The last time you had sexual intercourse, did you or your partner use a condom?

- (a) I have never had sexual intercourse
- (b) Yes
- (c) No

37. The last time you had sexual intercourse, what one **method** did you or your partner use **to prevent pregnancy**? (Select only one response.)

- (a) I have never had sexual intercourse
- (b) No method was used to prevent pregnancy
- (c) Birth control pills
- (d) Condoms
- (e) An IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon)
- (f) A shot (such as Depo-Provera), patch (such as Ortho Evra), or birth control ring (such as NuvaRing)
- (g) Withdrawal or some other method
- (h) Not sure