



## Cell Phone Use and Text Messaging While Driving

Collected Jan 2009 – Dec 2009

Analyzed October 2012

### Monitor Introduction

This RRFSS Monitor describes cell phone use while driving and text messaging while driving among Waterloo Region adults aged 18 and older. The purpose of these modules is to determine the proportion of adults who talk on their cell phones while driving or who send or read text messages while driving, as well as the frequency in which they engage in these activities. From January to December of 2009, a total of 1064 adults were asked about recent cell phone use while driving and use of text messaging while driving (cycles 1 to 3). Estimates are presented with 95% confidence intervals (CI) and appear in the following format: (CI: XX.X-XX.X). Tests of significance were performed on the data and all statistically significant differences were determined by p-values less than 0.05.

#### Fast Facts

- **48.9%** (CI: 45.7-52.1) of drivers talk or text on their cell phones while driving
- **32.2%** (CI: 27.8-36.6) of drivers use a hands-free device most of the time when they talk on their cell phones while driving
- **14.9%** (CI: 12.5-17.3) send or read text messages on their cell phone while driving

### Almost half of all Waterloo Region drivers talk or text on their cell phones while driving

In 2009, almost half (**48.9%** (CI: 45.7-52.1)) of Waterloo Region drivers said they talk on their cell phone while driving or send and/or read text messages while driving. This proportion increases to **57.2%** (CI: 53.3-61.1%) for people who drive every day.

#### Significant differences exist by age and sex

Adult drivers aged 18 to 24, 25 to 44, and 45 to 64 years were significantly more likely to talk or text while driving when compared to adult drivers aged 65 years or older (Table 1).

**Table 1: Per cent of adult drivers aged 18 years and older who use their cell phone to talk or send and receive text messages while driving, by age group, Waterloo Region, 2009**

18 to 24	25 to 44	45 to 64	65+
62.1% (CI: 50.1-74.1) <sup>x</sup>	60.7% (CI: 55.6-65.8) <sup>y</sup>	46.3% (CI: 41.0-51.5) <sup>z</sup>	19.3% (CI: 13.4-25.1) <sup>x, y, z</sup>

<sup>x,y,z</sup>...Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05, e.g. two proportions with an <sup>x</sup> next to them are statistically different from each other.

The proportion of male drivers who talk or text on their cell phone while driving was significantly higher than the proportion of female drivers (**53.2%** (CI: 48.5-57.9) versus **45.0%** (CI: 40.7-49.4), respectively).

*Household income and education level make a difference in drivers who talk or text on their cell phone while driving*

Adult drivers with a household income of \$70,000 or greater were significantly more likely to talk or text on their cell phone while driving than adult drivers with an income of less than \$30,000 or adult drivers who did not disclose their income (Table 2).

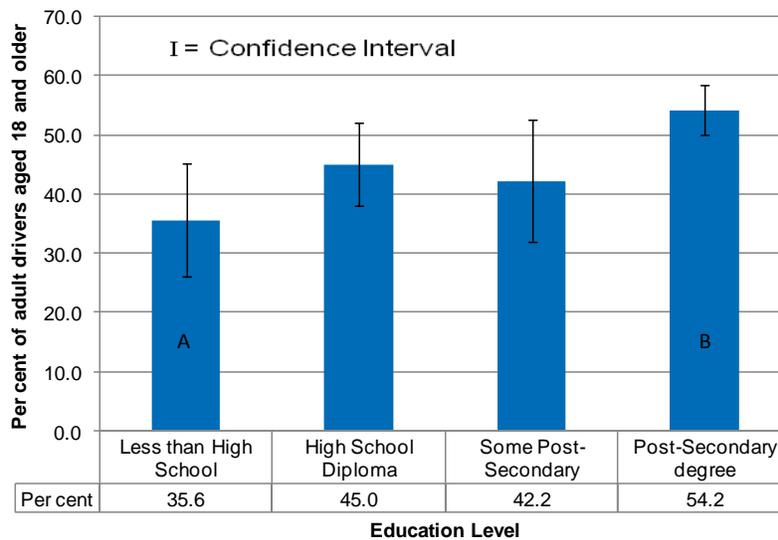
**Table 2: Per cent of adult drivers aged 18 years and older who use their cell phone to talk or send and receive text messages while driving, by household income, Waterloo Region, 2009**

Don't Know/Refused	Less than \$30,000	\$30,000 to \$69,999	\$70,000 to \$99,999	\$100,000 or more
40.7% (CI: 34.2-47.2) <sup>x</sup>	37.1% (CI: 30.1-44.1) <sup>y</sup>	49.0% (CI: 40.6-57.4)	59.1% (CI: 52.0-66.2) <sup>x,y</sup>	57.6% (CI: 50.7-64.4) <sup>x,y</sup>

x,y,z... Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05, e.g. two proportions with an 'x' next to them are statistically different from each other.

Adult drivers with a post-secondary degree (B) were significantly more likely to talk or text on their cell phone than drivers who had not completed a high school education (A) (Figure 1).

**Figure 1: Per cent of adult drivers aged 18 years and older who use their cell phone to talk or send and receive text messages while driving, by education level, Waterloo Region, 2009**



A,B,C... Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05

No differences in drivers who talk or text on the cell phone while driving were found between adults by municipality.

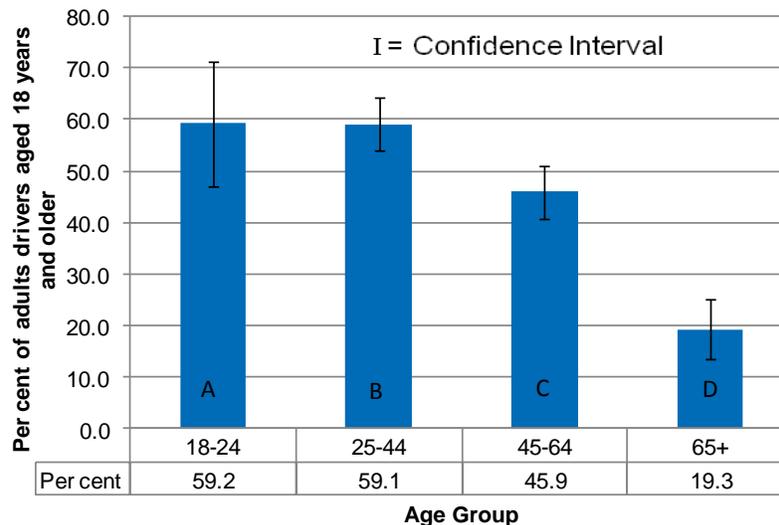
## Half of all Waterloo Region drivers say they never talk on their cell phone while driving

In 2009, half of all Waterloo Region drivers (**52.1%** (CI: 48.9-55.3)) say they never talk on their cell phone while driving, while **27.2%** (CI: 24.3-30.0) say the seldom talk on their cell phone while driving, **12.9%** (CI: 10.7-15.1) say they sometimes talk on their cell phone while driving and **7.9%** (CI: 6.1-9.7) say the always or most times talk on their cell phone while driving. The proportion of drivers who most times, sometimes and seldom talk on their cell phones while driving increases when you only consider people who are daily drivers (**10.9%** (CI: 8.4-13.4), **15.3%** (CI: 12.4-18.2), and **29.8%** (CI: 26.2-33.5) respectively). In contrast, the proportion of people who say they never talk on their cell phone while driving decreases when you consider people who are daily drivers (**44.0%** (CI: 40.1-47.9)).

### Significant differences exist by age and sex for drivers who talk on their cell phone while driving

Adult drivers aged 65 years and older (D) were significantly less likely to talk on their cell phone while driving compared to adult drivers aged 18 to 64 years (A, B and C). As well, adults drivers aged 45 to 64 years (C) were significantly less likely to talk on their cell phone while driving compared to adults drivers aged 25 to 44 years (B) (Figure 3).

**Figure 2: Per cent of adult drivers aged 18 years and older who talk on their cell phone while driving, by age group, Waterloo Region, 2009**



A,B,C...Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05

The proportion of female drivers who talk on their cell phone while driving was significantly lower than the proportion of male drivers (**44.0%** (CI: 39.6-48.3) versus **52.2%** (CI: 47.5-57.0)).

### Household income and education level make a significant difference in the proportion of drivers who talk on their cell phone while driving

Adult drivers who have a household income less than \$30,000 or who did not disclose their income are significantly less likely to talk on their cell phone while driving when compared to adult drivers who have

a household income of \$70,000 to \$99,999 or \$100,000 or greater (Table 3). Adult drivers with a household income of \$100,000 or more were the most likely to talk on their cell phone while driving.

**Table 3: Per cent of adult drivers aged 18 years and older who talk on their cell phone while driving, by household income, Waterloo Region, 2009**

Don't Know/Refused	Less than \$30,000	\$30,000 to \$69,999	\$70,000 to \$99,999	\$100,000 or more
40.2% (CI: 33.6-46.7) <sup>x,w</sup>	36.8% (CI: 29.8-43.8) <sup>y,z</sup>	48.0% (CI: 39.6-56.4)	55.6% (CI: 48.4-62.8) <sup>x,y</sup>	57.6% (CI: 50.7-64.4) <sup>w,z</sup>

<sup>x,y,z</sup>... Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05, e.g. two proportions with an <sup>x</sup> next to them are statistically different from each other.

Adult drivers who had not completed their high school education were significantly less likely to talk on their cell phone while driving in comparison to adult drivers who had a post-secondary degree (Table 4).

**Table 4: Per cent of adult drivers aged 18 years and older who talk on their cell phone while driving, by education level, Waterloo Region, 2009**

Less than High school	High school Diploma	Some post-secondary	Post-secondary Degree
35.2% (CI: 25.7-44.7) <sup>x</sup>	44.2% (CI: 37.3-51.1)	42.2% (CI: 31.9-52.5)	52.8% (CI: 48.5-57.0) <sup>x</sup>

<sup>x,y,z</sup>... Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05, e.g. two proportions with an <sup>x</sup> next to them are statistically different from each other.

No differences in drivers who talk on their cell phone while driving were found between adults by municipality.

*Only age and household income are significant when looking at daily drivers who talk on their cell phones while driving*

Adult daily drivers aged 65 years or older were significantly less likely to talk on their cell phone while driving compared to adult daily drivers aged 18 to 24, 25 to 44 and 45 to 64 years. As well, adult daily drivers aged 45 to 64 years were significantly less likely to talk on their cell phone while driving when compared to adult daily drivers aged 18 to 24 years (Table 5).

**Table 5: Per cent of adult daily drivers aged 18 years and older who talk on their cell phone while driving, by age group, Waterloo Region, 2009**

18 to 24	25 to 44	45 to 64	65+
77.9% (CI: 63.7-92.1) <sup>x, w</sup>	64.6% (CI: 58.7-70.5) <sup>y</sup>	52.2% (CI: 46.0-58.4) <sup>z, w</sup>	28.0% <sup>E</sup> (CI: 18.6-37.5) <sup>x, y, z</sup>

<sup>x,y,z</sup>... Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05, e.g. two proportions with an <sup>x</sup> next to them are statistically different from each other.

The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

Adult daily drivers with a household income less than \$30,000 (A) were significantly less likely to talk on their cell phone while driving in comparison to adult daily drivers with a household income of \$100,000 or more (B) (Figure 3).

**Figure 3: Per cent of adult daily drivers aged 18 years and older who talk on their cell phone while driving, by household income, Waterloo Region, 2009**

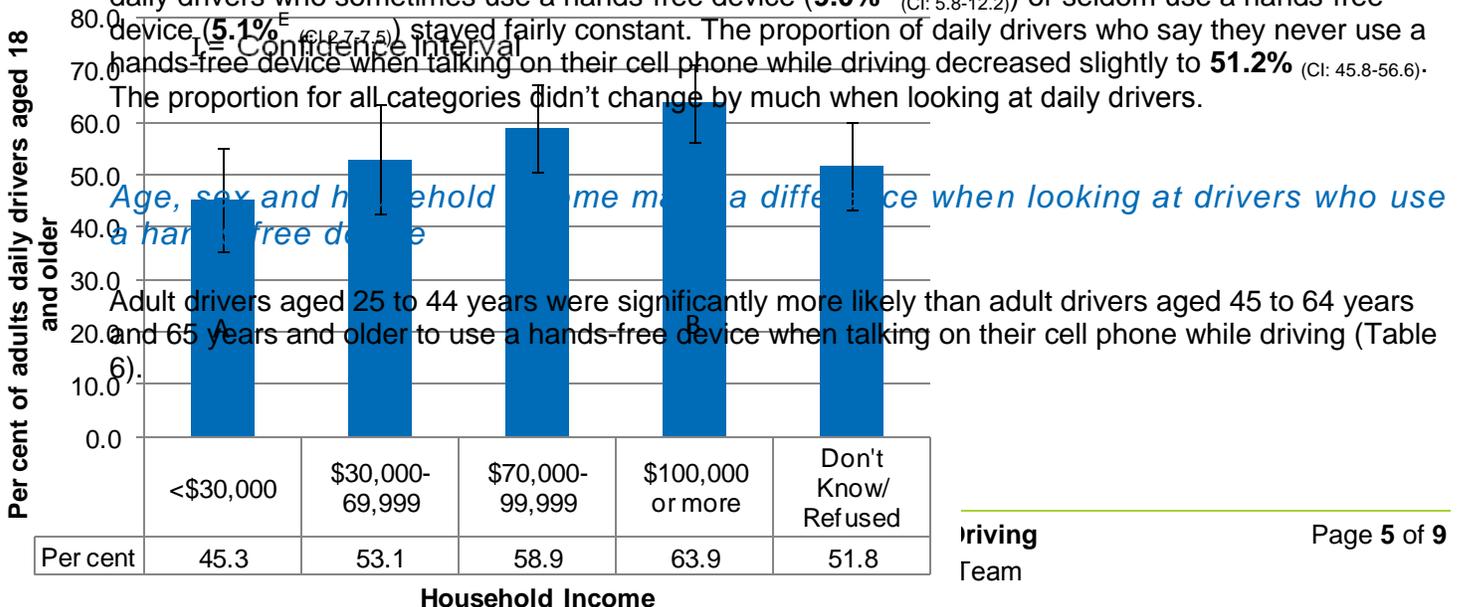
A,B,C...Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05

No differences in daily drivers who talk on the cell phone while driving were found between adults by sex, education level, or municipality.

## About one third of Waterloo Region drivers use a hands-free device most of the time when they talk on their cell phone while driving

In 2009, almost a third (**32.3%** (CI: 27.9-36.8)) of Waterloo Region drivers say they use a hands-free device most of the time when talking on their cell phone while driving, while **8.2%** (CI: 5.6-10.8) say they sometimes use a hands-free device, **5.3%** (CI: 3.1-7.5) say they seldom use a hands-free device and over half (**54.2%** (CI: 49.4-58.9)) say they never use a hands-free device when talking on their cell phone while driving.

When looking at daily drivers, just over a third (**34.6%** (CI: 29.5-39.8)) of adult daily drivers say they use a hands-free device most of the time when talking on their cell phone while driving. The proportion of daily drivers who sometimes use a hands-free device (**9.0%** (CI: 5.8-12.2)) or seldom use a hands-free device (**5.1%** (CI: 2.7-7.5)) stayed fairly constant. The proportion of daily drivers who say they never use a hands-free device when talking on their cell phone while driving decreased slightly to **51.2%** (CI: 45.8-56.6). The proportion for all categories didn't change by much when looking at daily drivers.



**Table 6: Per cent of adult drivers aged 18 years and older who use a hands-free device when talking on their cell phone while driving, by age group, Waterloo Region, 2009**

18 to 24	25 to 44	45 to 64	65+
45.9% <sup>E</sup> (CI: 30.1-61.7)	54.7% (CI: 47.9-61.4) <sup>x, y</sup>	38.7% (CI: 31.1-46.3) <sup>x</sup>	25.4% <sup>E</sup> (CI: 10.3-40.5) <sup>y</sup>

x,y,z... Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05, e.g. two proportions with an <sup>x</sup> next to them are statistically different from each other.

The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

Male drivers were significantly more likely than female drivers to use a hands-free device when talking on their cell phone while driving (**50.8%** (CI: 44.1-57.6) versus **40.5%** (CI: 33.9-47.1) respectively).

Adult drivers with a household income of \$100,000 or more were significantly more likely than adult drivers with a household income less than \$30,000 or a household income of \$30,000 to \$69,999 to use a hands-free device when talking on their cell phone while driving (Table 7).

**Table 7: Per cent of adult drivers aged 18 years and older who use a hands-free device when talking on their cell phone while driving, by household income, Waterloo Region, 2009**

Don't Know/Refused	Less than \$30,000	\$30,000 to \$69,999	\$70,000 to \$99,999	\$100,000 or more
46.4% (CI: 35.8-57.0)	35.4% <sup>E</sup> (CI: 23.6-47.2) <sup>x</sup>	35.9% <sup>E</sup> (CI: 24.3-47.5) <sup>y</sup>	45.9% (CI: 35.9-55.8)	55.2% (CI: 46.3-64.1) <sup>x, y</sup>

x,y,z... Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05, e.g. two proportions with an <sup>x</sup> next to them are statistically different from each other.

The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

No differences in drivers who use a hands-free device when talking on their cell phone while driving were found between adults by education level or municipality.

## Majority of Waterloo Region drivers say they never send or read text messages while driving

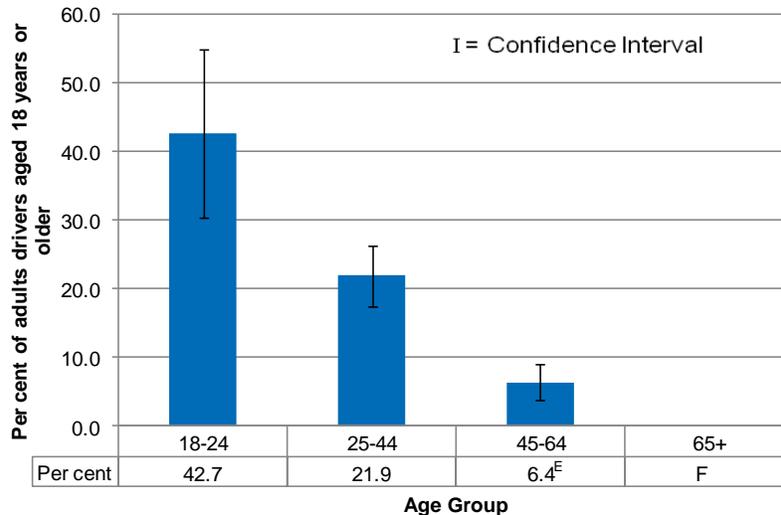
In 2009, the majority (**85.1%** (CI: 82.7-87.5)) of Waterloo Region drivers said they never send or read text messages while driving. Conversely, few drivers (**2.4%**<sup>E</sup> (CI: 1.4-3.3)) said they send or read text messages most of the time while driving, **4.3%**<sup>E</sup> (CI: 2.9-5.7) said they send or read text messages sometimes while driving, and **8.3%** (CI: 6.4-10.1) said they seldom send or read text messages on their cell phone while driving.

The proportions only change slightly when you look at adults who drive daily. The majority (**82.5%** (CI: 79.4-85.6)) of daily drivers never send or read text messages on their cell phone while driving. There was a slight increase in the proportions of drivers who read or send text messages most of the time or sometimes while driving, as well as the proportion of drivers who seldom read or send text messages on their cell phone while driving (**3.4%**<sup>E</sup> (CI: 2.0-4.9), **5.4%**<sup>E</sup> (CI: 3.5-7.3), and **8.6%** (CI: 6.3-10.9) respectively).

*Age and household income made a difference when looking at drivers who send or read text messages while driving*

Adult drivers aged 18 to 24 years (A) were significantly more likely to send or read text messages while driving than adult drivers aged 25 to 44 years (B) and 45 to 64 years (C). In addition, adult drivers aged 25 to 44 years were significantly more likely to send or read text messages while driving than adult drivers aged 45 to 64 years (C) (Figure 4).

**Figure 4: Per cent of adult drivers aged 18 years and older who send or read text messages while driving, by age group, Waterloo Region, 2009**



A,B,C... Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05  
 The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

An "F" denotes unacceptable sampling variability, and estimates or conclusions based on these data will be unreliable and most likely invalid.

Adult drivers with a household income of \$100,000 or more were significantly more likely to send or read text messages while driving compared to adult drivers with a household income less than \$30,000 or a household income of \$30,000 to \$69,999, as well as adult driver who did not disclose their household income (Table 8).

**Table 8: Per cent of adult drivers aged 18 years and older who send or read text messages while driving, by household income, Waterloo Region, 2009**

Don't Know/Refused	Less than \$30,000	\$30,000 to \$69,999	\$70,000 to \$99,999	\$100,000 or more
10.8% <sup>E</sup> (CI: 6.5-15.1) <sup>x</sup>	11.3% <sup>E</sup> (CI: 6.5-16.0) <sup>y</sup>	8.8% <sup>E</sup> (CI: 3.5-14.0) <sup>z</sup>	16.3% <sup>E</sup> (CI: 10.5-22.2)	23.9% (CI: 18.1-29.7) <sup>x, y, z</sup>

x,y,z... Represent statistically significant differences between two proportions (%) with a p-value of less than 0.05, e.g. two proportions with an "x" next to them are statistically different from each other.

The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

No differences in drivers who send or read text messages while driving were found between adults by sex, education level, or municipality.

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## About RRFSS survey

Information here is presented from the Rapid Risk Factor Surveillance System (RRFSS). RRFSS is an on-going telephone survey occurring in participating public health units across Ontario. On a monthly basis, a random sample of approximately 100 adults aged 18 and older are interviewed regarding risk behaviours of importance to public health. The survey is conducted by the Institute for Social Research (ISR) at York University, on behalf of Region of Waterloo Public Health. For more information, please visit [www.rfss.on.ca](http://www.rfss.on.ca)

### *Analyzed Questions (Total Weighted Sample = 1074)*

- In a typical week, how many days do you drive a motor vehicle? Would you say you drive every day, about 5 or 6 days a week, about 2 to 4 days a week, about once a week, or less than once a week?
- How often in a typical week do you TALK on a cell phone or other mobile or wireless device while driving? Would you say every time you drive, most times when you drive, sometimes when you drive, seldom when you drive, or never?
- And when you TALK on your phone or other mobile or wireless drive while driving, do you use a hands-free mode every time, most times, sometimes, seldom or never?
- And how often, in a typical week, do you send or read text-messages or email on your cell phone or other mobile or wireless device while driving? Would you say every time you drive, most times when you drive, sometimes when you drive, seldom when you drive, or never?

### *Analyzed Indicators*

- Prevalence of talking on a cell phone while driving (n=1064)
- Frequency of talking on a cell phone while driving (n=1064)
- Prevalence of talking on a cell phone while driving among daily drivers (n=698)
- Frequency of talking on a cell phone while driving among daily drivers (n=698)
- Use of Hands-free mode when talking on a cell phone while driving (n=492)
- Use of Hands-free mode when talking on a cell phone while driving among daily drivers (n=377)
- Prevalence of text messaging or emailing while driving (n=1064)
- Prevalence of text messaging or emailing while driving among daily drivers (n=698)
- Frequency of sending or reading text messages or email while driving (n=1064)
- Frequency of sending or reading text messages or email while driving among daily drivers (n=698)
- Prevalence of text messaging or emailing or talking on a cell phone while driving (n=1064)
- Prevalence of text messaging or emailing or talking on a cell phone while driving among daily drivers (n=698)

### *Important definitions and cautions:*

- All data were analyzed according to the RRFSS Manual of Operations. The superscript “E” denotes high sampling variability, and estimates must be interpreted with caution. The superscript “F” denotes unacceptable sampling variability, and estimates or conclusions based on these data will be unreliable and most likely invalid. The sample was weighted to reflect the number of adults in a household.
- A "module" in RRFSS is generally a self-contained group of questions on a specific public health topic. Generally, modules may be added or taken off the RRFSS every 4 month period (cycle) of the on-going survey system.

- Confidence intervals and coefficient of variation were calculated using unweighted sample sizes and weighted estimates.
- Tests of significance were performed and statistically significant differences were determined by p-value <0.05. The terms “significant” and “significance” indicates a statistically significant difference.
- The survey was only administered in English, using a random digit dialing methodology and represents the behaviours, attitudes, and beliefs of adults in Waterloo Region.
- Responses which include “don’t know” and “refused” are generally removed from analysis when they represent less than 5% of the sample.

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