Social Media Use in Grey Bruce

Analysis of data from the Rapid Risk Factor Surveillance System

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About RRFSS

The Rapid Risk Factor Surveillance System (RRFSS) is a public health surveillance survey that initiated with a pilot project through the Durham Region Health Department in 1999. It is coordinated by the Institute for Social Research at York University, and has been a multi-health unit collaborative surveillance project since 2000. Health units across Ontario have had the option of participating in RRFSS for an annual fee, and are able to participate in the development and revision of topic-based interview modules in RRFSS (RRFSS Working Group, 2010).

RRFSS is administered as a 12- to 20-minute telephone survey using random digit dialing. It targets 60 to 150 respondents aged 18 and over per month from each participating health region. At present, it does not include cell phones in its sampling frame, so respondents are only reached if they have landlines.

This report presents data analysed only for the Grey Bruce region.

About this Document

The rates and figures presented in this document are estimates based on RRFSS survey results. These are presented with the upper and lower limits of their 95% confidence intervals following in parentheses.

Figures noted with an asterisk (*) should be used with caution, as the estimates have wide confidence intervals and are therefore less reliable.

Where possible, statistical tests are used to determine whether there are significant differences in rates among groups. In this document, the survey-adjusted Pearson's *F* is used to determine whether categorical variables are independent (have no relationship). Also, logistic regression using multiple variables is used (but not presented) to determine which of the variables is or are the crucial factor or factors influencing a binary (two category—i.e., "Yes, No") dependent variable. For between-group comparisons of rates that are significantly different, the significance level is footnoted.

All statistical analyses were written and conducted in Stata version 14.1.

Statistical Abbreviations:

F = corrected Pearson's F statistic (corrected Pearson χ^2 divided by degrees of freedom)
df = degrees of freedom
p = significance level

For more information and explanation of any of the concepts included in this report, contact Virginia at extension 1522.

Findings

The *Social Media* module asks twelve questions about respondents' use of social media sites and health-related information-seeking behaviours (RRFSS Working Group, 2014). This module was asked from May to August 2015 (to 223 respondents).

Summary

In Grey Bruce, 70.5% of adults use social media, and 53.7% of adults use social media every day or almost every day. Every day or almost every day use of social media is significantly higher among women and younger people.

The most frequently used social media sites are:

- Facebook (61.6%, higher among younger people)
- YouTube (47.0%, higher among younger people)
- Pinterest (24.8%, higher among women and younger people)
- Twitter (11.8%, higher among younger people)
- Blogs (5.1%)

About one in five people (18.4%) reported using other social media, including: LinkedIn, Instagram, Google, Snapchat, email, Hotmail, Yahoo, Snapfish, Twitch, online gaming, online newspaper, texting and webchat.

In Grey Bruce, 20.3% of adults use social media to find health-related information, and 23.5% use social media to share health-related information. Both uses of social media are more common among women, and using social media to share health-related information is more common among younger people.

As far as reach, currently, 4.2%* (2.2% to 8.0%) of Grey Bruce adults use social media to follow health unit activity. An additional 6.7%* (3.6% to 12.1%) are interested in following health unit activity on social media, for a possible combined reach of 10.9% of Grey Bruce adults who may directly follow health unit activity on social media. Considering followers with sharers of health unit posts, social media use in Grey Bruce may have the potential to reach a large proportion of the adult population.

Module Questions

1. Social media are online communities where people share information, ideas, messages, and personal content like pictures and videos. Do you use social media such as Facebook, Twitter, YouTube, Pinterest or blogs? Yes/No
2. In a usual week, on how many days do you use social media: every day, most days, one or two days a week, or less than one day a week?
3. Do you use Facebook? Yes/No
4. Do you use Twitter? Yes/No
5. Do you use YouTube? Yes/No
6. Do you use Pinterest? Yes/No
7. Do you use blogs? Yes/No
8. Which other social media do you use? (specify)
9. Do you use social media such as Facebook, Twitter, YouTube, Pinterest or blogs to look for health-related information? Yes/No
10. Do you use social media to share health-related information by linking, retweeting, sending links, or commenting on the information you find? Yes/No
11. Do you currently follow the Grey Bruce Health Unit on social media such as Facebook or Twitter? Yes/No
12. How interested would you be in following the Grey Bruce Health Unit on social media such as Facebook or Twitter: very interested, somewhat interested, not very interested, or not at all interested?

Notes: Questions 2 through 11 are asked only if the respondent has stated that they use social media. Question 12 is asked of all respondents who have (1) heard of social media (even if they do not currently use social media), and (2) do not currently follow the health unit on social media.

Using Social Media

As shown in Table 1, in 2015, nearly three out of four Grey Bruce adults (70.5%, 64.0% to 76.3%) used social media. Age has a moderate effect on the rate of use of social media.

The rate of use of social media by women in Grey Bruce is 74.1% (66.1% to 80.8%), compared to 64.2% (52.8% to 74.3%) among men. The rate of use is highest among 18 to 44-year-olds, at 93.3% (83.3% to 97.5%), followed by 70.4% (60.2% to 78.9%) among 45 to 64-year-olds, and 48.8% (37.0% to 60.7%) among seniors.

Local use of social media does not appear to differ significantly by sex ($p = .133$), but does differ significantly by age group ($p < .001$). Based on the results of logistic regression, all age groups have rates that significantly differ from one another (as the 95% confidence intervals of their odds ratios do not include 1). As age group increases, the likelihood of using social media decreases.

Those aged 45 to 64 are 25% less likely to use social media than those 18 to 44, while those 65 and over are 48% less likely than the youngest age group to use social media. Those aged 65 and over are 31% less likely than those in the middle age group to use social media.

Table 1. Use of Social Media by Age Group and Sex, 2015, GBHU

	Overall 70.5% (64.0% to 76.3%)		
By Sex	**Males** 64.2% (52.8% to 74.3%)	**Females** 74.1% (66.1% to 80.8%)	
	Not significantly different from Females	*Not significantly different from Males*	
By Age Group	**Younger Adults (18 to 44)** 93.3% (83.3% to 97.5%)	**Older Adults (45 to 64)** 70.4% (60.2% to 78.9%)	**Seniors (65 and over)** 48.8% (37.0% to 60.7%)
	33% higher rate than Older Adults ++	*25% lower rate than Younger Adults ++*	*48% lower rate than Younger Adults +++*
	91% higher rate than Seniors +++	*44% higher rate than Seniors +*	*31% lower rate than Older Adults +*

Two-way analysis, Sex by Use of Social Media: $F = 2.27$, df = [1, 221], $p = .133$ (not significant)

Two-way analysis, Age Group by Use of Social Media: $F = 14.27$, df = [2.00, 441.64], $p < .001$ (significant)

\+ Significant difference at the 5% level

++ Significant difference at the 1% level

+++ Significant difference at the 0.1% level

Use of Social Media Every Day or Most Days

As presented in Table 2, in 2015, just over half of Grey Bruce adults (53.7%, 46.6% to 60.6%) used social media every day or most days. Together, age and sex have a moderate effect on the rate of daily or almost daily use of social media.

The rate of use of social media every day or most days by women in Grey Bruce is 60.8% (52.1% to 69.0%), compared to 41.2% (30.2% to 53.2%) among men. The rate of daily or almost daily use is highest among 18 to 44-year-olds at 77.5% (63.2% to 87.3%), followed by 52.9% (42.3% to 63.3%) among 45 to 64-year-olds, and 32.0%* (21.9% to 44.1%) among seniors.

Grey Bruce women are significantly more likely than men to use social media every day or most days ($p = .009$). Women are 47% more likely than men to use social media every day or most days. Age has a significant effect on daily or almost daily use of social media ($p < .001$). Those aged 45 to 64 are 32% less likely to use social media every day or most days than those 18 to 44, while those 65 and over are 59% less likely than the youngest age group to use social media every day or most days. Those aged 65 and over are 40% less likely than those in the middle age group to use social media every day or most days.

Table 2. Daily / Almost Daily Use of Social Media by Age Group and Sex, 2015, GBHU

	Overall 53.7% (46.6% to 60.6%)		
By Sex	**Males** 41.2% (30.2% to 53.2%)	**Females** 60.8% (52.1% to 69.0%)	
	32% lower rate than Females ++	*48% higher rate than Males ++*	
By Age Group	**Younger Adults (18 to 44)** 77.5% (63.2% to 87.3%)	**Older Adults (45 to 64)** 52.9% (42.3% to 63.3%)	**Seniors (65 and over)** 32.0% (21.9% to 44.1%)
	47% higher rate than Older Adults +	*32% lower rate than Younger Adults +*	*59% lower rate than Younger Adults +++*
	142% higher rate than Seniors +++	*65% higher rate than Seniors +*	*40% lower rate than Older Adults +*

Two-way analysis, Sex by Daily / Almost Daily Use of Social Media: F = 6.89, df = [1, 221], p = .009 (significant)

Two-way analysis, Age Group by Daily / Almost Daily Use of Social Media: F = 11.17, df = [1.97, 436.29], p < .001 (significant)

*Use with caution.

\+ Significant difference at the 5% level

++ Significant difference at the 1% level

+++ Significant difference at the 0.1% level

Use of Facebook

As Table 3 shows, in 2015, 61.6% (54.7% to 68.1%) of Grey Bruce adults used Facebook. Age has a moderate effect on the rate of use of Facebook.

The local rate of Facebook use by women is 65.7% (57.1% to 73.4%), compared to 54.5% (42.9% to 65.7%) among men. Among the youngest age group, 90.0% (79.1% to 95.5%) use Facebook, followed by 57.3% (46.7% to 67.3%) of those aged 45 to 64, and 41.6% (30.4% to 53.7%) of seniors.

Local use of Facebook does not differ significantly by sex ($p = .119$), but does differ significantly by age group ($p < .001$). Based on the results of the logistic regression, the rate of the youngest age group differs significantly from the rates for the two older age groups. Those aged 45 to 64 are 36% less likely than the youngest age group to use Facebook, while those aged 65 and over are 54% less likely to use Facebook. The rates for the two older age groups do not differ significantly from one another.

Table 3. Use of Facebook by Age Group and Sex, 2015, GBHU

	Overall 61.6% (54.7% to 68.1%)		
By Sex	**Males** 54.5% (42.9% to 65.7%) *Not significantly different from Females*	**Females** 65.7% (57.1% to 73.4%) *Not significantly different from Males*	
By Age Group	**Younger Adults (18 to 44)** 90.0% (79.1% to 95.5%) *57% higher rate than Older adults +++* *116% higher rate than Seniors +++*	**Older Adults (45 to 64)** 57.3% (46.7% to 67.3%) *36% lower rate than Younger Adults +++* *Not significantly different from Seniors*	**Seniors (65 and over)** 41.6% (30.4% to 53.7%) *54% lower rate than Younger Adults +++* *Not significantly different from Older Adults*

Two-way analysis, Sex by Use of Facebook: $F = 2.45$, df = [1, 221], $p = .119$ (not significant)

Two-way analysis, Age Group by Use of Facebook: $F = 15.35$, df = [2.00, 441.25], $p < .001$ (significant)

+++ Significant difference at the 0.1% level

Use of Twitter

As table 4 shows, in 2015, only 11.8%* (7.6% to 17.6%) of Grey Bruce adults used Twitter. Age has a small to moderate effect on the rate of use of Twitter.

The local rate of Twitter use among women is 9.4%* (5.2% to 16.7%), and 15.8%* (8.5% to 27.4%) among men. Among the youngest age group, 25.8%* (14.7% to 41.3%) use Twitter, followed by 9.2%* (4.6% to 17.7) of those aged 45 to 64. The rate for the oldest age group is too low to report (fewer than 5 cases of the sample group aged 65 or over reported using Twitter).

Local use of Twitter does not differ significantly by sex (p = .225), but does differ significantly by age group (p = .006). The rates among the youngest age group and the middle age group significantly differ, with the middle age group being 64% less likely to use Twitter.

Table 4. Use of Twitter by Age Group and Sex, 2015, GBHU

	Overall 11.8%* (7.6% to 17.6%)		
By Sex	**Males** 15.8%* (8.5% to 27.4%)	**Females** 9.4%* (5.2% to 16.7%)	
	Not significantly different from Females	*Not significantly different from Males*	
By Age Group	**Younger Adults (18 to 44)** 25.8%* (14.7% to 41.3%)	**Older Adults (45 to 64)** 9.2%* (4.6% to 17.7%)	**Seniors (65 and over)** Suppressed
	180% higher rate than Older Adults #	*64% lower rate than Younger Adults #*	*(no comparisons)*
	(no comparison to Seniors possible)	*(no comparison to Seniors possible)*	

Two-way analysis, Sex by Use of Twitter: F = 2.18, df = [1, 221], p = .225 (not significant)

Two-way analysis, Age Group by Use of Twitter: F = 7.85, df = [1.92, 423.22], p = .006 (significant)

* Use with caution.

Significant difference at the 7.5% level

Use of YouTube

As Table 5 shows, in 2015, about half (47.0%, 40.0% to 54.1%) of Grey Bruce adults used YouTube. Age has a small to moderate effect on the rate of use of YouTube.

The local rate of use of YouTube among women is 45.5% (36.8% to 54.4%), and 49.7% (38.2% to 61.3%) among men. The rate of use by those aged 18 to 44 is 66.7% (52.0% to 78.7%), compared to 46.1% (35.8% to 56.8%) among those aged 45 to 64, and 29.6%* (19.8% to 41.7%) among those aged 65 and over.

Local use of YouTube does not differ significantly by sex ($p = .571$), but does differ significantly by age group ($p < .001$). Based on logistic regression results, the rates of use of YouTube for all age groups differ significantly from one another—as age increases, use of YouTube decreases.

Relative to the youngest age group, those aged 45 to 64 are 31% less likely to use YouTube, and those aged 65 and over are 56% less likely to use YouTube. Those 65 and over are 36% less likely than those aged 45 to 64 to use YouTube.

Table 5. Use of YouTube by Age Group and Sex, 2015, GBHU

	Overall 47.0% (40.0% to 54.1%)		
By Sex	**Males** 49.7% (38.2% to 61.3%)	**Females** 45.5% (36.8% to 54.4%)	
	Not significantly different from Females	*Not significantly different from Males*	
By Age Group	**Younger Adults (18 to 44)** 66.7% (52.0% to 78.7%)	**Older Adults (45 to 64)** 46.1% (35.8% to 56.8%)	**Seniors (65 and over)** 29.6%* (19.8% to 41.7%)
	Not significantly different from Older Adults	*Not significantly different from Younger Adults*	*56% lower rate than Younger Adults +++*
	125% higher rate than Seniors +++	*Not significantly different from Seniors*	*Not significantly different from Older Adults*

Two-way analysis, Sex by Use of YouTube: F = 0.32, df = [1, 221], p = .057 (not significant)

Two-way analysis, Age Group by Use of YouTube: F = 7.38, df = [1.98, 436.93], p < .001 (significant)

* Use with caution.

+++ Significant difference at the 0.1% level

Use of Pinterest

As Table 6 shows, in 2015, one quarter (24.8%, 19.0% to 31.7%) of Grey Bruce adults used Pinterest. Sex has a moderate effect and age has a small to moderate effect on the rate of use of Pinterest.

The local rate of use of Pinterest among women is 34.6% (26.5% to 43.7%), compared to 7.9%* (3.2% to 18.2%) among men. The rate of use among those in the youngest age group is 39.2%* (26.1% to 54.0%), compared to 24.3%* (16.0% to 35.1%) among those in the 45 to 64 age group, and 12.0%* (5.9% to 22.9%) among seniors.

Local use of Pinterest is significantly higher among women ($p < .001$), with women being 4.4 times as likely as men to use Pinterest.

Local use of Pinterest also differs significantly by age group ($p = .007$). The rates of Pinterest use for the oldest and youngest age groups differ significantly. Those in the oldest age group are 69% less likely than those in the youngest age group to use Pinterest. Neither the oldest nor youngest age group has a significantly different rate than the middle age group.

Table 6. Use of Pinterest by Age Group and Sex, 2015, GBHU

	Overall 24.8% (19.0% to 31.7%)		
By Sex	**Males** 7.9%* (3.2% to 18.2%) *77% lower rate than Females +++*	**Females** 34.6% (26.5% to 43.7%) *338% higher rate than Males +++*	
By Age Group	**Younger Adults (18 to 44)** 39.2%* (26.1% to 54.0%) *Not significantly different from Older Adults* *227% higher rate than Seniors ++*	**Older Adults (45 to 64)** 24.3%* (16.0% to 35.1%) *Not significantly different from Younger Adults* *Not significantly different from Seniors*	**Seniors (65 and over)** 12.0%* (5.9% to 22.9%) *69% lower rate than Younger Adults ++* *Not significantly different from Older Adults*

Two-way analysis, Sex by Use of Pinterest: F = 14.52, df = [1, 221], $p < .001$ (significant)

Two-way analysis, Age Group by Use of Pinterest: F = 5.04, df = [1.98, 437.06], $p = .007$ (significant)

* Use with caution.

++ Significant difference at the 1% level

+++ Significant difference at the 0.1% level

Use of Blogs

In 2015, just 5.1%* of Grey Bruce adults (2.7% to 9.4%) said they used blogs.

Use of Other Social Media

In 2015, only just under 1 in 5 adults (18.4%, 13.2% to 25.1%) of Grey Bruce adults used other social media. These responses included the following specified answers, from most frequently to least frequently mentioned: LinkedIn, Instagram, Google, Snapchat, email, Hotmail, Yahoo, Snapfish, Twitch, online gaming, online newspaper, texting, and webchat.

Use of Social Media to Find Health-related Information

As table 7 shows, in 2015, about one in five adults (20.3%, 15.1% to 26.8%) of Grey Bruce adults used social media to find health-related information. Sex has a small to moderate effect on this rate.

The local rate of use of social media to find health-related information among women is 27.0% (19.6% to 36.0%), compared to 8.6%* (4.2% to 16.8%) among men. The rate is 29.2%* (17.6% to 44.3%) among those in the youngest age group, followed by 18.0%* (11.2% to 27.9%) among those in the middle age group, and 15.4%* (8.4% to 26.6%) among those in the oldest age group.

The local rate of use of social media to find health-related information is significantly higher among women (p = .001), with women being 3.1 times as likely as men to use social media to find health-related information. The rate does not differ significantly by age group (p = .176), however.

Table 7. Use of Social Media to Find Health-related Information by Age Group and Sex, 2015, GBHU

	Overall 20.3% (15.1% to 26.8%)		
By Sex	**Males** 8.6%* (4.2% to 16.8%) *68% lower rate than Females ++*	**Females** 27.0% (19.6% to 36.0%) *214% higher rate than Males ++*	
By Age Group	**Younger Adults (18 to 44)** 29.2%* (17.6% to 44.3%) *Not significantly different from Older Adults* *Not significantly different from Seniors*	**Older Adults (45 to 64)** 18.0%* (11.2% to 27.9%) *Not significantly different from Younger Adults* *Not significantly different from Seniors*	**Seniors (65 and over)** 15.4%* (8.4% to 26.6%) *Not significantly different from Younger Adults* *Not significantly different from Older Adults*

Two-way analysis, Sex by Use of Social Media to Find Health-related Information: F = 10.75, df = [1, 219], p = .001 (significant)
Two-way analysis, Age Group by Use of Social Media to Find Health-related Information: F = 1.75, df = [1.97, 431.85], p = .176 (not significant)
* Use with caution.
++ Significant difference at the 1% level

Use of Social Media to Share Health-related Information

As table 8 shows, in 2015, about one quarter of adults (23.5%, 17.8% to 30.4%) of Grey Bruce adults used social media to share health-related information. Sex and age both have a small to moderate effect on this rate.

The local rate of use of social media to share health-related information is 31.2% (23.3% to 40.4%) among women, compared to 9.9%* (4.6% to 20.3%) among men. Among those in the youngest age group, the rate is 40.5%* (27.2% to 55.4%), followed by 23.4%* (15.1% to 34.5%) among those in the middle age group, and 8.0%* (3.7% to 16.6%) among seniors.

The local rate of use of social media to share health-related information is significantly higher among women (p = .002), with women being 3.2 times as likely as men to use social media to share health-related information. The rate is also differs significantly by age (p < .001). All age groups had rates that differed significantly from one another. Compared to those in the youngest age group, those in the 45 to 64 age group were 42% less likely to use social media to share health-related information, while those in the 65 and over age group were 80% less likely to do so. Compared to the middle age group, those in the oldest age group were 66% less likely to use social media to share health-related information.

Table 8. Use of Social Media to Share Health-related Information by Age Group and Sex, 2015, GBHU

	Overall 23.5% (17.8% to 30.4%)		
By Sex	**Males** 9.9%* (4.6% to 20.3%) *68% lower rate than Females ++*	**Females** 31.2% (23.3% to 40.4%) *215% higher rate than Males ++*	
By Age Group	**Younger Adults (18 to 44)** 40.5%* (27.2% to 55.4%) Not significantly different from Older Adults 406% higher rate than Seniors +++	**Older Adults (45 to 64)** 23.4%* (15.1% to 34.5%) Not significantly different from Younger Adults Not significantly different from Seniors	**Seniors (65 and over)** 8.0%* (3.7% to 16.6%) 80% lower rate than Younger Adults +++ Not significantly different from Older Adults

Two-way analysis, Sex by Use of Social Media to Share Health-related Information: F = 10.03, df = [1, 219], p = .002 (significant)
Two-way analysis, Age Group by Use of Social Media to Share Health-related Information: F = 7.93, df = [1.92, 419.77], p < .001 (significant)

* Use with caution.
++ Significant difference at the 1% level
+++ Significant difference at the 0.1% level

Use of Social Media to Follow Health Unit Activity

In 2015, about one in twenty-five Grey Bruce adults (4.2%*, 2.2% to 8.0%) used social media to follow health unit activity. This rate is too low to compare between sexes or among age groups.

Additional Interest in Following Health Unit Activity

In 2015, an additional one in fifteen Grey Bruce adults (6.7%*, 3.6% to 12.1%) were interested in following health unit activity on social media. Thus, a combined direct reach of 10.9% of Grey Bruce adults could be achieved if those who are interested in following health unit activity on social media actively subscribe to updates.

References

RRFSS Working Group. (2010). History. Retrieved from http://www.rrfss.on.ca/index.php?pid=3#History

RRFSS Working Group. (2014, October 20). Social Media (Data Dictionary). Rapid Risk Factor Surveillance System.