

Tutorial for extracting data from a Statistics Canada CANSIM table

[CANSIM tables](#) provide users with wide access to Statistics Canada data covering a range of topics.

For this tutorial, let's work look at crime, using the [Incident-based crime statistics, by detailed violations](#).

1. The crime statistics CANSIM table number is [252-0051](#), which takes you to the main page.

HOME > CANSIM

Table 252-0051 [1](#), [2](#), [3](#), [54](#)

Incident-based crime statistics, by detailed violations
annual (number unless otherwise noted)

Feedback

[Data table](#) [Add/Remove data](#) [Manipulate](#) [Download](#) [Related information](#) [Help](#)

The data below is a part of CANSIM table 252-0051. Use the [Add/Remove data](#) tab to customize your table.

Selected items [\[Add/Remove data\]](#)

Violations = Total, all violations [0]

Geography ^{3, 47}	Statistics	2012	2013	2014	2015	2016
	Actual incidents	2,244,458	2,098,776	2,052,925	2,118,681	2,142,545
	Rate per 100,000 population	6,458.77	5,969.99	5,775.64	5,910.08	5,904.54

2. Select the “Add/Remove data” tab to obtain a more detailed look that will allow us to drill down.

The screenshot displays the CANSIM web interface. At the top, there are navigation links: "Information for...", "Browse by subject", "Browse by key resource", and "Help". Below these, the breadcrumb "Home > CANSIM" is visible. The main heading is "Table 252-0051" with links "1, 2, 3, 5, 4". The title is "Incident-based crime statistics, by detailed violations" and the subtitle is "annual (number unless otherwise noted)". A "Feedback" button is in the top right. Below the title, there is a tabbed interface with "Data table", "Add/Remove data" (highlighted with a red box), "Manipulate", "Download", "Related information", and "Help". Below the tabs, a message says "Select the specific items from each step to create your customized CANSIM table." The interface is divided into two main sections: "Step 1- Select: Geography" and "Step 2- Select: Violations". "Step 1" shows a list of provinces and territories with checkboxes, all of which are selected. "Step 2" shows a list of violation categories with checkboxes, with "Total, all violations [0]" selected. A "+ Expand" link is visible on the right side of Step 2.

3. As you can see in “Step 2 – Select: Violations”, there are many violations from which to choose, making political bromides about being “tough on crime” nothing short of ridiculous. Use your browser’s vertical scroll bar to see the six steps, then scroll back up to the top. In each step, we can select aggregate numbers by only

selecting the top category in selections one through three.

The screenshot shows a three-step selection process for crime statistics. Each step has a title bar, a count of selected items, and a list of checkboxes with expand links.

- Step 1- Select: Geography 3. 42**
(48 of 48 items selected)
Use the following checkboxes to select/deselect items from the list below: [+ Expand](#)
☒ All ☐ Canada ☐ Newfoundland and Labrador ☐ St. John's, Newfoundland and Labrador ☐ Prince Edward Island ☐ Nova Scotia
- Step 2- Select: Violations**
(1 of 258 items selected)
Use the following checkboxes to select/deselect items from the list below: [+ Expand](#)
☒ All ☐ Total, all violations [0] ☐ Total, all Criminal Code violations (including traffic) [25] ☐ Total, all Criminal Code violations (excluding traffic) [50] ☐ Total violent Criminal Code violations [100] ☐ Homicide [110]
- Step 3- Select: Statistics**
(14 of 14 items selected)
Use the following checkboxes to select/deselect items from the list below: [+ Expand](#)
☒ All ☐ Actual incidents ☐ Rate per 100,000 population ☐ Percentage change in rate ☐ Total cleared ☐ Cleared by charge

4. In step four, you can select a date range.

The screenshot shows a date range selection dropdown menu. The menu is open, displaying a list of years from 1998 to 2016. The year 2012 is highlighted. Below the dropdown, there are input fields for 'From' and 'To' dates, with '2012' and '2016' respectively, and a note '(Annual data)'.

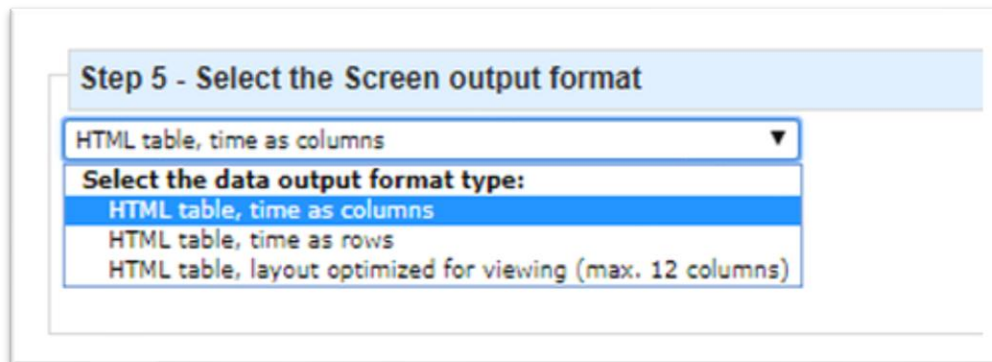
Data for

- 1998
- 1999
- 2000
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012**
- 2013
- 2014
- 2015
- 2016

By default, the most recent periods available will be selected.

From : 2012 To : 2016 (Annual data)

5. In step five, you can determine the layout of the csv file that you will export and open in Excel.



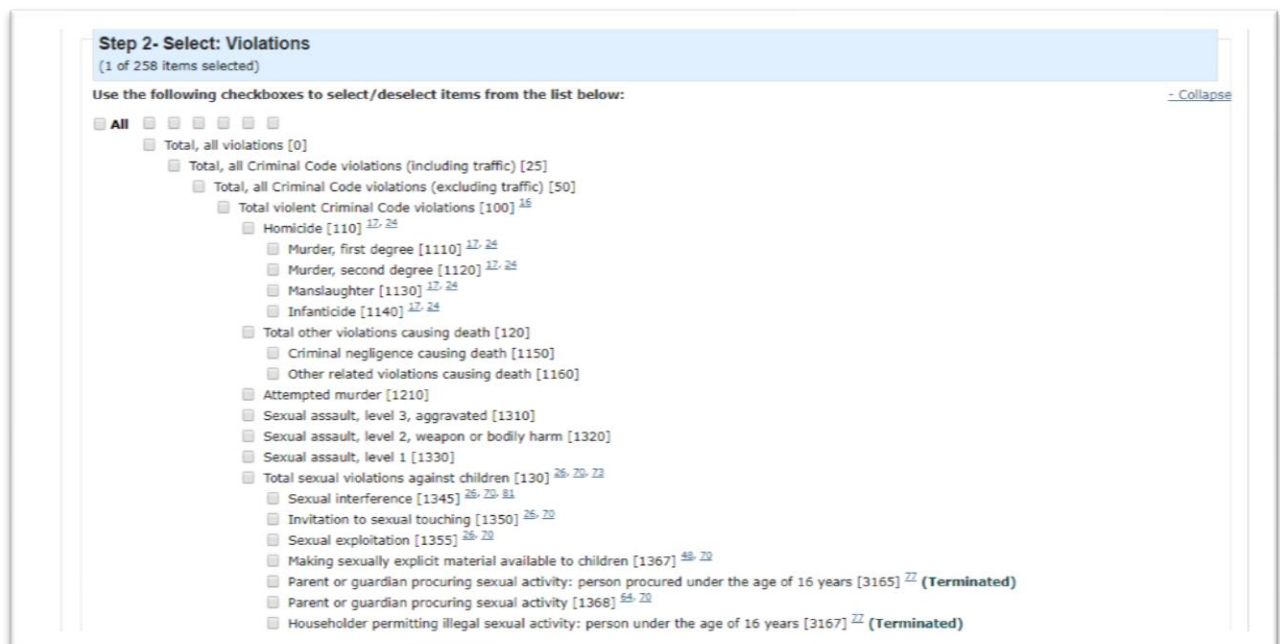
6. Before we begin selecting an offence, it's important to note that you can drill down in CANSIM tables using the steps in this tutorial, which is what makes them so useful for journalists working to deadline.
7. For the purposes of this tutorial, let's look at offences for cannabis possession and compare the rates in Ottawa and Gatineau, two municipalities on opposite sides of the Ottawa river that, together, make up the National Capital Region.

8. Scroll back up to step one, and select “Ottawa-Gatineau, Quebec part” and “Ottawa-Gatineau, Ontario part”.



- ☐ Moncton, New Brunswick [8](#), [58](#)
- ☐ Saint John, New Brunswick [4](#), [47](#), [58](#)
- ☐ Quebec [50](#), [62](#), [80](#)
 - ☐ Saguenay, Quebec [5](#), [55](#)
 - ☐ Québec, Quebec
 - ☐ Sherbrooke, Quebec [32](#), [37](#)
 - ☐ Trois-Rivières, Quebec
 - ☐ Montréal, Quebec [38](#), [50](#), [53](#), [80](#)
 - ☒ Ottawa-Gatineau, Quebec part [6](#), [61](#)
- ☐ Ontario [7](#), [67](#)
 - ☐ Ottawa-Gatineau, Ontario/Quebec [6](#), [52](#), [61](#), [68](#)
 - ☒ Ottawa-Gatineau, Ontario part [6](#), [52](#), [68](#)
 - ☐ Kingston, Ontario [8](#)
 - ☐ Peterborough, Ontario [8](#)
 - ☐ Toronto, Ontario [33](#)
 - ☐ Hamilton, Ontario [33](#)

9. Expand the view in step two to scroll through the 258 violations, and de-select all the selections.

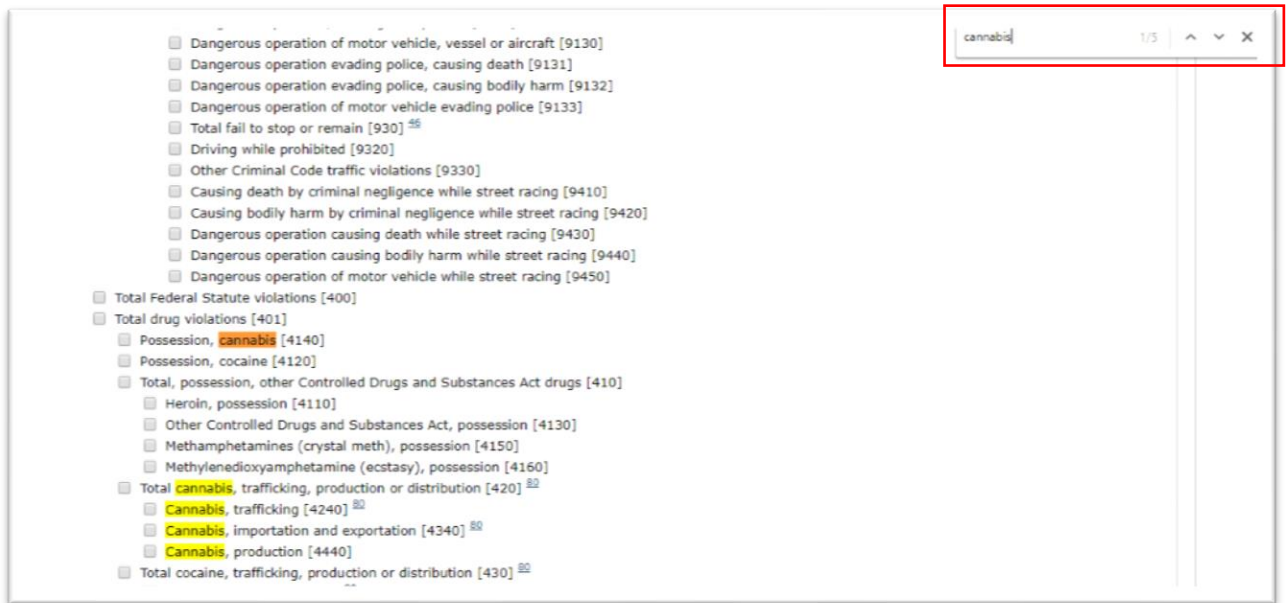


Step 2- Select: Violations
(1 of 258 items selected)

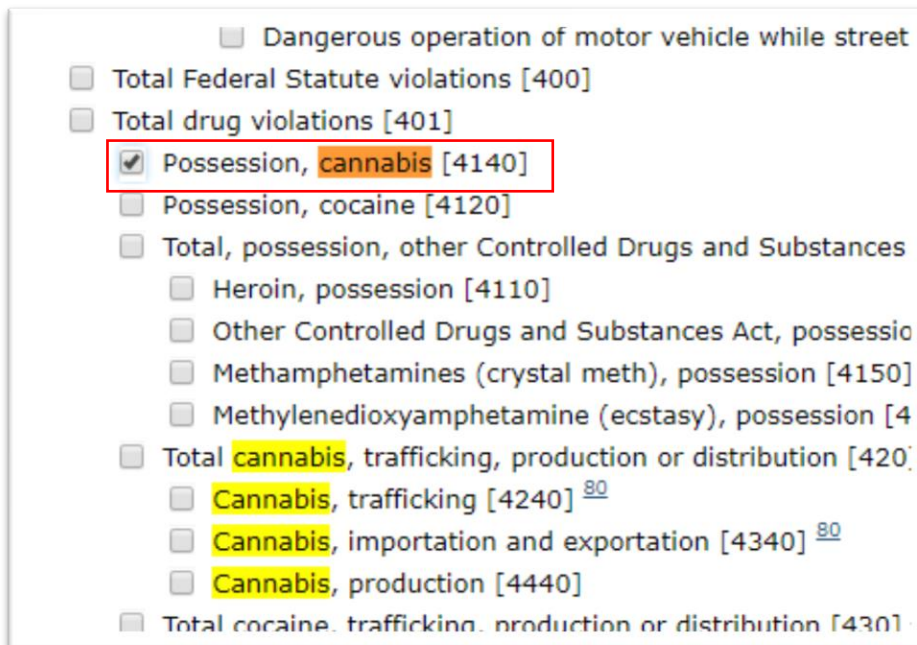
Use the following checkboxes to select/deselect items from the list below: [Collapse](#)

- ☒ All
- ☐ Total, all violations [0]
- ☐ Total, all Criminal Code violations (including traffic) [25]
- ☐ Total, all Criminal Code violations (excluding traffic) [50]
- ☐ Total violent Criminal Code violations [100] [16](#)
 - ☐ Homicide [110] [17](#), [24](#)
 - ☐ Murder, first degree [1110] [17](#), [24](#)
 - ☐ Murder, second degree [1120] [17](#), [24](#)
 - ☐ Manslaughter [1130] [17](#), [24](#)
 - ☐ Infanticide [1140] [17](#), [24](#)
 - ☐ Total other violations causing death [120]
 - ☐ Criminal negligence causing death [1150]
 - ☐ Other related violations causing death [1160]
 - ☐ Attempted murder [1210]
 - ☐ Sexual assault, level 3, aggravated [1310]
 - ☐ Sexual assault, level 2, weapon or bodily harm [1320]
 - ☐ Sexual assault, level 1 [1330]
 - ☐ Total sexual violations against children [130] [26](#), [29](#), [22](#)
 - ☐ Sexual interference [1345] [26](#), [29](#), [81](#)
 - ☐ Invitation to sexual touching [1350] [26](#), [22](#)
 - ☐ Sexual exploitation [1355] [26](#), [22](#)
 - ☐ Making sexually explicit material available to children [1367] [49](#), [22](#)
 - ☐ Parent or guardian procuring sexual activity: person procured under the age of 16 years [3165] [22](#) (Terminated)
 - ☐ Parent or guardian procuring sexual activity [1368] [64](#), [22](#)
 - ☐ Householder permitting illegal sexual activity: person under the age of 16 years [3167] [22](#) (Terminated)

10. Using the “find” function on your keyboard, type the keyword “cannabis”.



11. Select “Possession, cannabis [4140].



12. In step three, select “Actual incidents” and “Rate per 100,000 population.”

Step 3- Select: Statistics
(14 of 14 items selected)

Use the following checkboxes to select/deselect items from the list below: [- Collapse](#)

☐ All ☒ ☐

- ☒ Actual incidents
- ☒ Rate per 100,000 population
- ☐ Percentage change in rate ²²
- ☐ Total cleared
 - ☐ Cleared by charge
 - ☐ Cleared otherwise
- ☐ Total, persons charged ²³
- ☐ Rate, total persons charged per 100,000 population aged 12 years and over ²¹
- ☐ Total, adult charged
- ☐ Rate, adult charged per 100,000 population aged 18 years and over ²¹
- ☐ Total, youth charged ²³⁻⁴²
- ☐ Rate, youth charged per 100,000 population aged 12 to 17 years ²¹
- ☐ Total, youth not charged ²³⁻⁴²
- ☐ Rate, youth not charged per 100,000 population aged 12 to 17 years ²¹

13. In step four, select 2010 to 2016.

☐ Rate, youth not charged per 100,000 population aged 12 to 17 ye

Step 4 - Select the time frame

By default, only data for the most recent periods available will be retrieved. Y

From : To : (Annual data)

Step 5 - Select the Screen output format

14. Leave the step-5 selection as is and select the “Apply” tab in step 6 to produce a table that looks like this.

Table 252-0051 [3](#) [4](#) [5](#) [6](#) [7](#)

Incident-based crime statistics, by detailed violations
annual (number unless otherwise noted)

[Data table](#) [Add/Remove data](#) [Manipulate](#) [Download](#) [Related information](#) [Help](#)

The data below is a part of CANSIM table 252-0051. Use the [Add/Remove data](#) tab to customize your table.

Selected items [\[Add/Remove data\]](#)

Violations = Possession, cannabis [4140]

Geography 3 4	Statistics	2010	2011	2012	2013	2014	2015	2016
Ottawa-Gatineau, Quebec part 5 6	Actual incidents	869	774	732	859	866	721	647
	Rate per 100,000 population	280.60	245.13	228.99	266.39	266.40	220.33	195.40
Ottawa-Gatineau, Ontario part 5 52 68	Actual incidents	1,032	1,135	1,022	1,097	1,009	854	724
	Rate per 100,000 population	110.04	119.25	105.98	112.39	102.25	85.66	71.43

Footnotes: [Back to original table](#)

1. For the period from 1998 to 2015 Incident-based Uniform Crime Reporting Survey (UCR2) data are not available for all respondents. In order to report this level of detail for police services still reporting to the Aggregate Uniform Crime Reporting Survey (UCR) over this time, a process of imputation was applied to derive counts for violations that do not exist on their own in the aggregate survey. For approximately 80% of the aggregate offence codes, there is a 1:1 mapping with a new incident-based violation code. For violations where this was not the case, such as the aggregate other Criminal Code category, it was necessary to estimate (impute) this figure using the distribution of other Criminal Code offences from existing Incident-based UCR2 respondents.
2. During the production of each year's crime statistics, data from the previous year are revised to reflect any updates or changes that have been received from the police.

15. Be sure to read the footnotes to obtain the fullest understand of the data as possible. If you're satisfied with what you have,

select the “Download” tab above the table.

annual (number unless otherwise noted)

Data table Add/Remove data Manipulate **Download** Related information Help

Select an option to download data in the desired format.

Option 1 - Download data as displayed in the Data table tab

Select the language:
English ▼

Select the data output format type:
time as columns ▼

Select the file format:
CSV (comma-separated values) English spreadsheet ▼

Series details:
normal retrieval
vector identifier, plus coordinate, plus data ▼


Download data

Option 2 - Download entire table

Select the file format:
CSV (comma-separated values) English spreadsheet (14.0 mb) ▼ (Files modified on 2017-07-24)

Download entire table

16. Select the “Download data” tab, NOT “THE DOWNLOAD ENTIRE TABLE” tab.



Statistics
Canada

Statistique
Canada

Information for... ▼

Browse by subject

Browse by key resource

[Home](#)

Alternative format - CSV document

The following document is available for downloading or viewing:

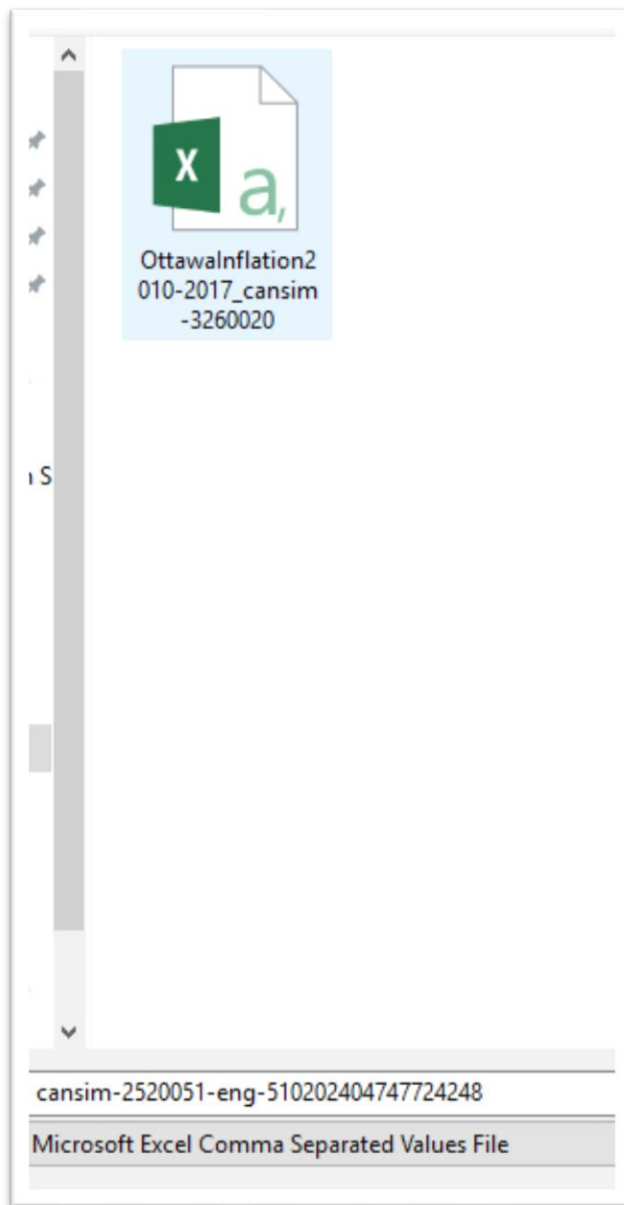
- [Download file from CANSIM \(CSV Version, 4.617 kb\)](#)

If you do not have a software that converts Comma-separated value (CSV) or semicolon-separated value (TSV) files, you can use the following tools:

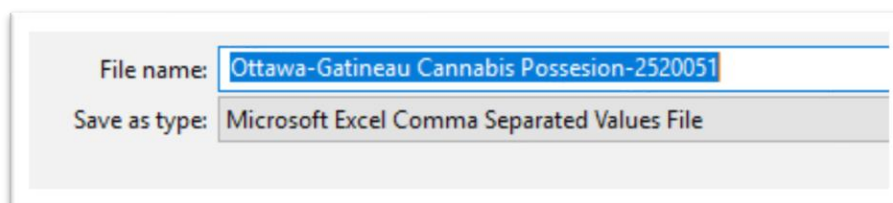
- [Excel viewer](#)

[Report a problem or mistake on this page](#)

17. Click the “Download file...” link, and browse to the location on your hard drive where you want to keep the file.



18. Rename the file with a label that makes more sense, but be sure to save the CANSIM number in the new title.



19. Open the file.

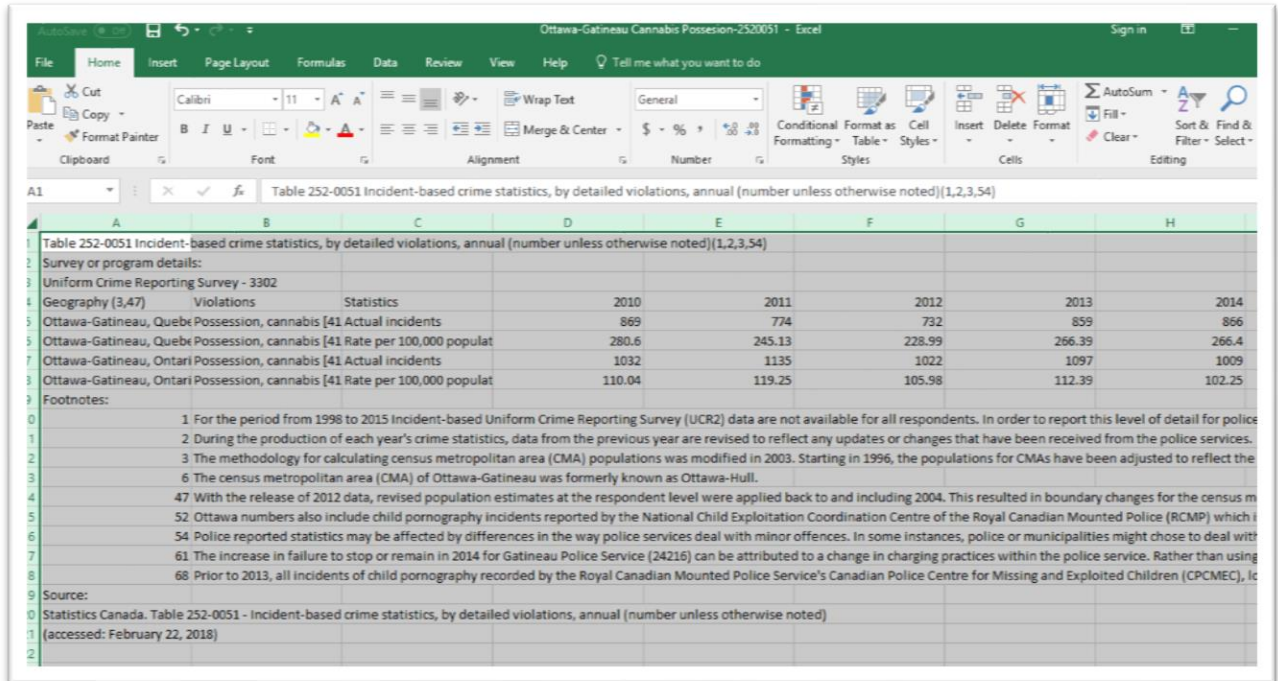


Table 252-0051 Incident-based crime statistics, by detailed violations, annual (number unless otherwise noted)(1,2,3,54)

	2010	2011	2012	2013	2014
Violations					
Statistics					
Ottawa-Gatineau, Quebec Possession, cannabis [41 Actual incidents	869	774	732	859	866
Ottawa-Gatineau, Quebec Possession, cannabis [41 Rate per 100,000 populat	280.6	245.13	228.99	266.39	266.4
Ottawa-Gatineau, Ontario Possession, cannabis [41 Actual incidents	1032	1135	1022	1097	1009
Ottawa-Gatineau, Ontario Possession, cannabis [41 Rate per 100,000 populat	110.04	119.25	105.98	112.39	102.25

Footnotes:

1 For the period from 1998 to 2015 Incident-based Uniform Crime Reporting Survey (UCR2) data are not available for all respondents. In order to report this level of detail for police

2 During the production of each year's crime statistics, data from the previous year are revised to reflect any updates or changes that have been received from the police services.

3 The methodology for calculating census metropolitan area (CMA) populations was modified in 2003. Starting in 1996, the populations for CMAs have been adjusted to reflect the

6 The census metropolitan area (CMA) of Ottawa-Gatineau was formerly known as Ottawa-Hull.

47 With the release of 2012 data, revised population estimates at the respondent level were applied back to and including 2004. This resulted in boundary changes for the census m

52 Ottawa numbers also include child pornography incidents reported by the National Child Exploitation Coordination Centre of the Royal Canadian Mounted Police (RCMP) which i

54 Police reported statistics may be affected by differences in the way police services deal with minor offences. In some instances, police or municipalities might chose to deal with

61 The increase in failure to stop or remain in 2014 for Gatineau Police Service (24216) can be attributed to a change in charging practices within the police service. Rather than using

68 Prior to 2013, all incidents of child pornography recorded by the Royal Canadian Mounted Police Service's Canadian Police Centre for Missing and Exploited Children (CPCMEC), ic

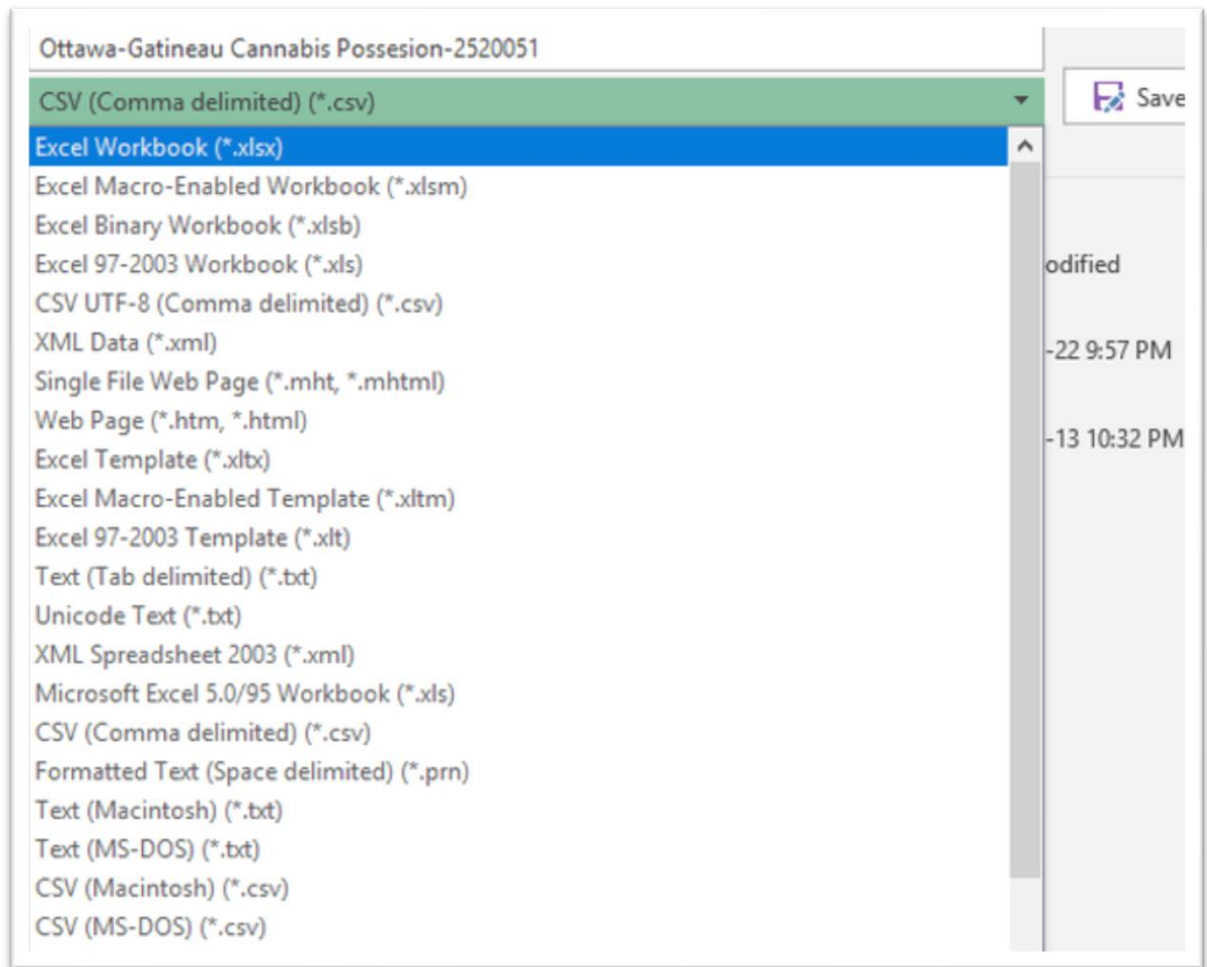
Source:

Statistics Canada. Table 252-0051 - Incident-based crime statistics, by detailed violations, annual (number unless otherwise noted)

(accessed: February 22, 2018)

20. Copy the CANSIM table's URL into the first available cell in the first row and save the file. This csv table will be your original copy.

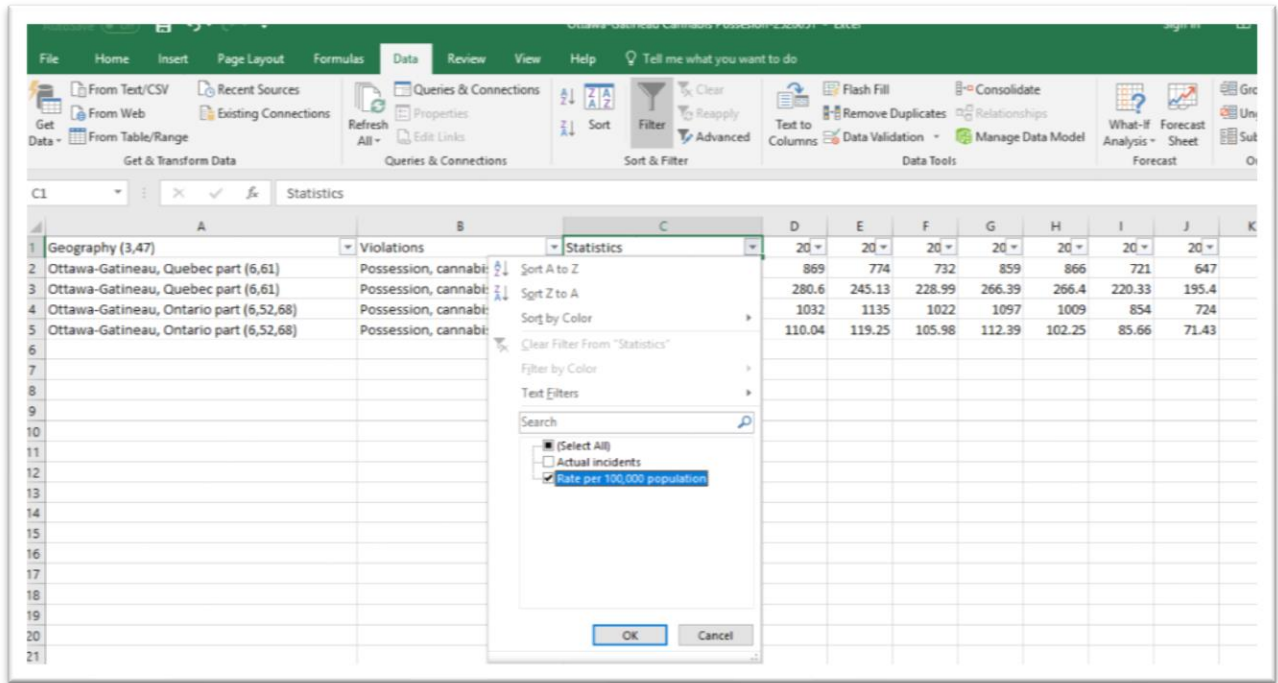
21. Use the “save as” option under “File” to save the csv file as an Excel workbook.



22. Once in Excel, select the table using your keyboard’s short-cut keys, open a new worksheet, and paste the table.

A	B	C	D	E	F	G	H	I	J
Geography (3,47)	Violations	Statistics	2010	2011	2012	2013	2014	2015	2016
Ottawa-Gatineau, Quebec part (6,61)	Possession, cannabis [4140]	Actual incidents	869	774	732	859	866	721	647
Ottawa-Gatineau, Quebec part (6,61)	Possession, cannabis [4140]	Rate per 100,000 population	280.6	245.13	228.99	266.39	266.4	220.33	195.4
Ottawa-Gatineau, Ontario part (6,52,68)	Possession, cannabis [4140]	Actual incidents	1032	1135	1022	1097	1009	854	724
Ottawa-Gatineau, Ontario part (6,52,68)	Possession, cannabis [4140]	Rate per 100,000 population	110.04	119.25	105.98	112.39	102.25	85.66	71.43

23. Now we can easily compare the two municipalities. While Ottawa had higher incident numbers for each of the six years in our date range (which makes sense, because it has more residents), Gatineau had a higher possession rate, which is easier to see if we apply the filter, and in column C, select “Rate per 100,000 population.”



	A	B	C	D	E	F	G	H	I	J	K
1	Geography (3,47)	Violations	Statistics	20	20	20	20	20	20	20	20
2	Ottawa-Gatineau, Quebec part (6,61)	Possession, cannabis	Sort A to Z	869	774	732	859	866	721	647	
3	Ottawa-Gatineau, Quebec part (6,61)	Possession, cannabis	Sort Z to A	280.6	245.13	228.99	266.39	266.4	220.33	195.4	
4	Ottawa-Gatineau, Ontario part (6,52,68)	Possession, cannabis	Sort by Color	1032	1135	1022	1097	1009	854	724	
5	Ottawa-Gatineau, Ontario part (6,52,68)	Possession, cannabis	Clear Filter From "Statistics"	110.04	119.25	105.98	112.39	102.25	85.66	71.43	
6			Filter by Color								
7			Test Filters								
8			Search								
9			(Select All)								
10			Actual incidents								
11			Rate per 100,000 population								
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											

	A	B	C	D	E	F	G	H	I	J	K
1	Geography (3,47)	Violations	Statistics	20	20	20	20	20	20	20	20
3	Ottawa-Gatineau, Quebec part (6,61)	Possession, cannabis [4140]	Rate per 100,000 population	280.6	245.13	228.99	266.39	266.4	220.33	195.4	
5	Ottawa-Gatineau, Ontario part (6,52,68)	Possession, cannabis [4140]	Rate per 100,000 population	110.04	119.25	105.98	112.39	102.25	85.66	71.43	
6											

24. If this is the result that you’d like to visualize in a bar chart, for instance, you can do so by copying this filtered table, and pasting it into a new csv or Excel file that can be uploaded to a program like infogram, or Google Fusion Tables.
25. To show that Gatineau’s rate has outpaced Ottawa’s you might want to use a line graph with the dates on the X-axis and the numbers on the Y-axis.