

Homicides in Mexico (2019-2020)

Data comparison across sources

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Introduction

There are several official and unofficial sources of data regarding homicide data in Mexico. Currently, there are two institutions that publish official data: The National Institute of Statistics and Geography (INEGI) and the Secretariat of Security and Citizen Protection (SSCP).

1. INEGI homicides by date of occurrence
2. SSCP interinstitutional group
3. SSCP open sources (newspapers)

Even if all these sources are official, they tend to differ due to the different methodologies they use. In this report we will compare homicide data from 2019 and 2020 as reported by the mentioned sources. In the first section, we briefly explain the characteristics and methodologies of each source. In the second section, we present the number of homicides reported by the sources as tables and graphs to grasp the magnitude of the differences.

Sources description

According to the Belisario Domínguez Institute (IBD), the organism in charge of the Mexican Senate scientific research, there are two official sources of homicide data in Mexico: INEGI and SSCP.¹ Below, we describe the data generated from this sources.

National Institute of Statistics and Geography (INEGI)

From all of this options, INEGI's data is considered the most reliable since they get information from the Health Ministry (Secretaría de Salud), the Civil Registry (Registro Civil) and the Prosecutors Office or Public Ministry (Ministerio Público). INEGI has a strong system that manages administrative registers from all these different sources.² The Institute also uses the criteria established by the World Health Organization (WHO), which requires that violent deaths must be classified as accidents, homicides or suicides; this means that INEGI reports a medical category that is equivalent to the legal category of *homicide* (*homicidio doloso* in Spanish).² The certificates that come from the Health Ministry are then compared against information from the Civil Registry and Local Prosecutor's Offices. In this sense, for each certificate coming from the Health Ministry, there must be a death certificate in the Civil Registry and an open investigation from prosecutors.²

All these controls guarantee both *quality* and *confiability* of INEGI's data, but entail a long process which generates a delay in the publication of the data. Regularly, official homicide data from INEGI is published more than a year after the end of the reported year. This means that data from 2020 has not been released. Nonetheless, a few weeks ago INEGI published data from 2019. The figures that were just reported are the one we use to compare them against data from the SSCP.

Finally, it is worth mentioning that INEGI differentiates the register date from the occurrence date. Usually the number of homicides that are reported refer to the register date, but, since INEGI has a comprehensive archive that includes medical records, they also have information regarding the date when the homicide occurred and not simply when it was registered. Our interest is focused on the date of occurrence, which is the measurement that we include in the report.³

Secretariat of Security and Citizen Protection (SSCP)

Preliminary data on homicides in Mexico is published by the Secretariat of Security and Citizen Protection (SSCP). This source is considered *not trustworthy* since, contrary to INEGI's practices, the methodology is not published. There have also been reports that this source tends to change historical time series of data.² In an effort to explain discrepancies in data, the experts have discussed whether this report refers to the number of open cases or the number of bodies that have been found.

Given the multiple problems of the SSCP data that have been identified, why should we use this source instead of INEGI. The main reason is that the SSCP published daily reports of the amount of homicides registered in the country within days of the register. This allows analysts and researchers to perform preliminary analysis on the recent behavior of the homicide, and other crimes, in the country when data from INEGI is not available.

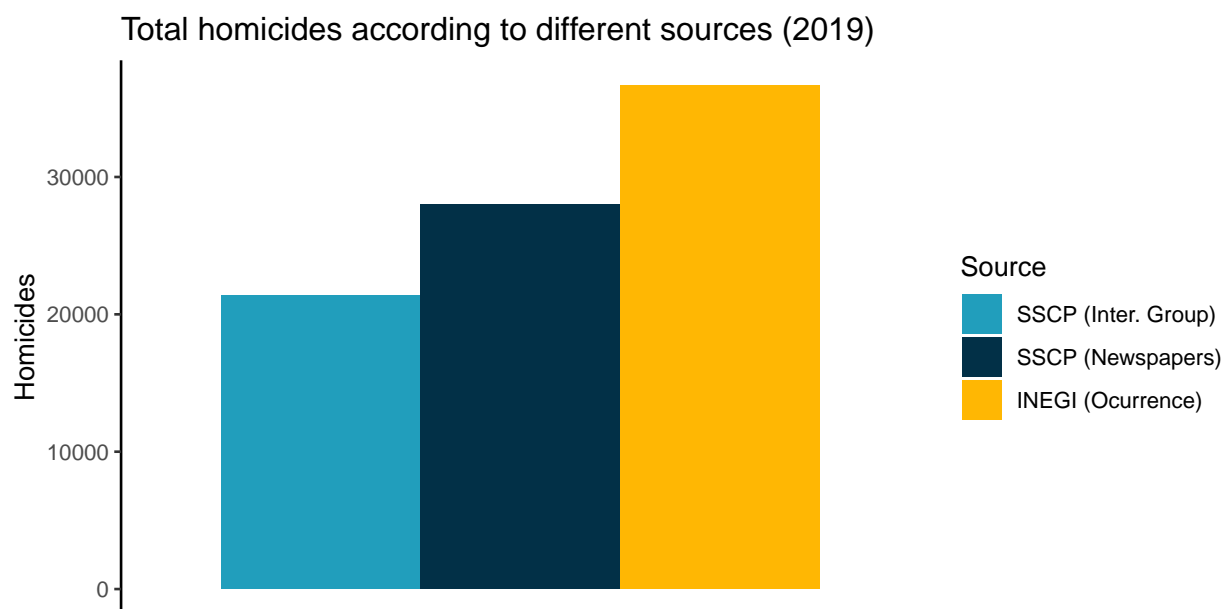
The SSCP has two different sources to account for homicides. The first one corresponds to an interinstitutional and interdisciplinary group conformed by the military (SEDENA), the navy (SEMAR) and the Attorney General Office (FGR). The second one is an account of local newspapers that report homicides at the county level. We also include these two sources in the report.⁴

Data comparison

National level homicides in 2019

As displayed in the following tables and figures, INEGI tends to report higher level of homicides. This is a natural behavior since the SSCP reports homicides on a daily basis almost immediately, while INEGI has more time to register all kind of data. The highest number of homicides is the one reported by INEGI according to the month of reporting, this makes sense since occurrence leaves out those deaths that do not have an identifiable date of death. The lowest number comes from the interinstitutional group of the SSCP, but we need to mention that there are no register for the first three months of 2019.

Source	Total homicides reported in 2019
SSCP (Inter. Group)	21394
SSCP (Newspapers)	28001
INEGI (Ocurrence)	36661

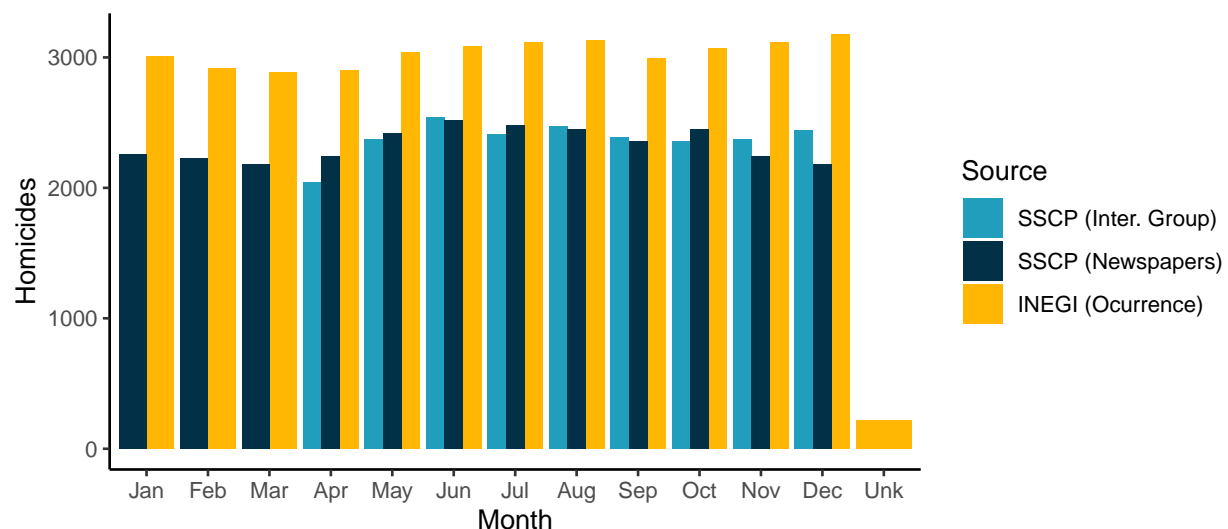


Source: Own elaboration with data from INEGI and SSPC, retrieved from:
<http://www.informeseuridad.cns.gob.mx/> and
<https://www.inegi.org.mx/programas/mortalidad/?ps=microdatos>

When we analyse the 2019 data by month, we can appreciate the same tendencies with more detail. Each pair of measurements, from INEGI and SSCP, are closer to each other than to any of the sources from the other institution. In almost every month, except January, the INEGI report by date of register has the highest number. The sources from the SSCP, interinstitutional group and newspapers, tend to vary month to month as which one of them reports the highest numbers.

Total monthly homicides comparison by different sources (2019)

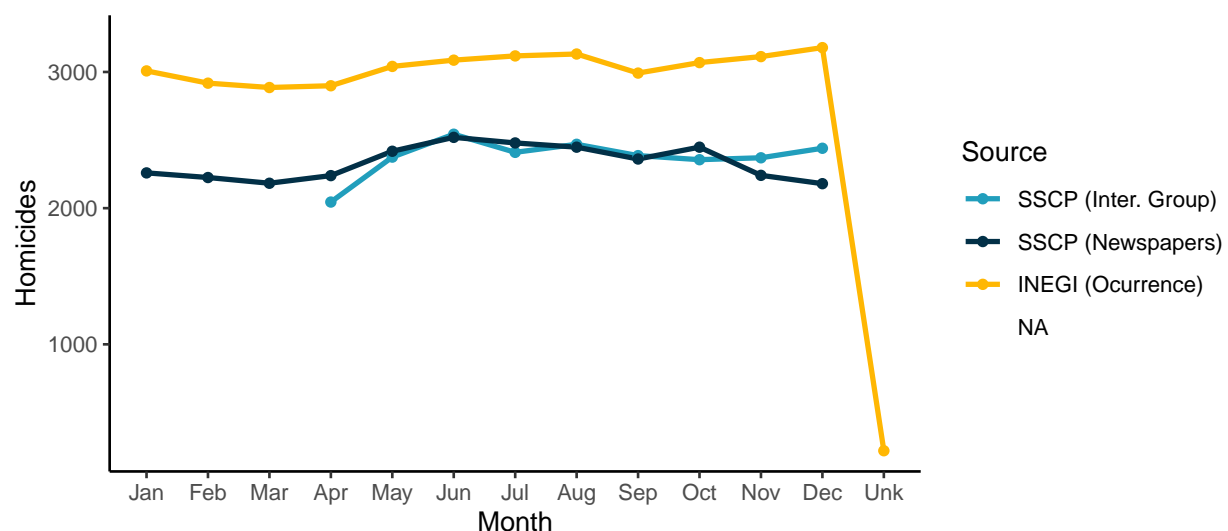
National level



Source: Own elaboration with data from INEGI and SSPC, retrieved from:
<http://www.informeseguridad.cns.gob.mx/> and
<https://www.inegi.org.mx/programas/mortalidad/?ps=microdatos>

Total monthly homicides comparison by different sources (2019)

National level

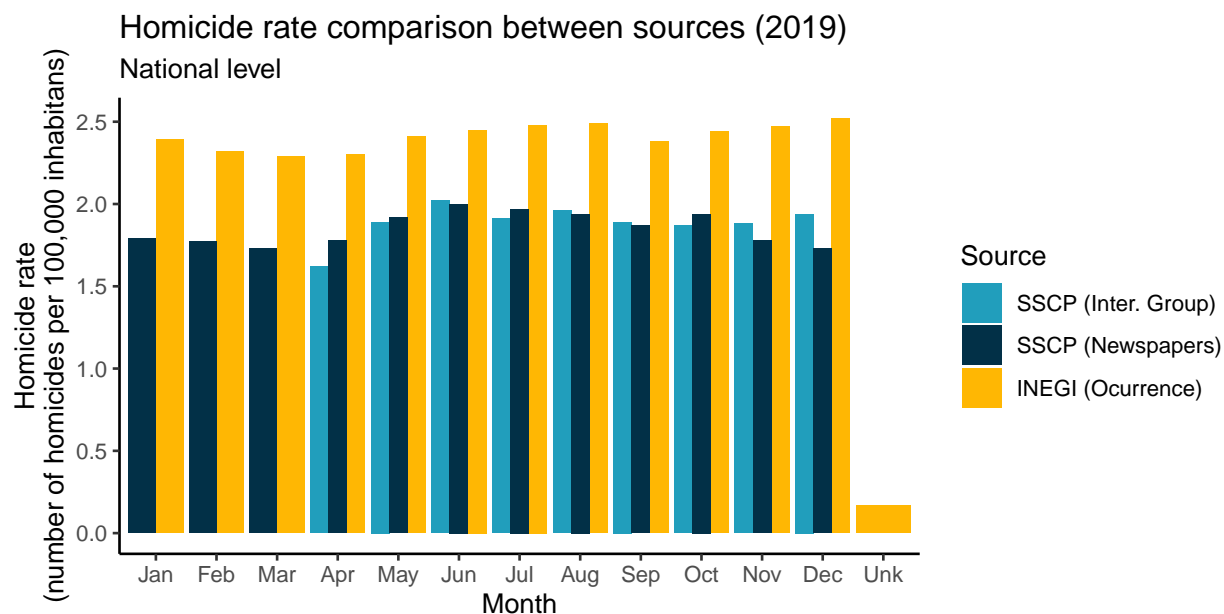


Source: Own elaboration with data from INEGI and SSPC, retrieved from:
<http://www.informeseguridad.cns.gob.mx/> and
<https://www.inegi.org.mx/programas/mortalidad/?ps=microdatos>

The following table show the number of homicides reported by the four sources for each month of the 2019.

Month	SSCP (Inter. Group)	SSCP (Newspapers)	INEGI (Ocurrance)
January	NA	2259	3008
February	NA	2225	2918
March	NA	2183	2886
April	2045	2239	2899
May	2375	2418	3041
June	2543	2520	3087
July	2410	2479	3118
August	2469	2448	3132
September	2386	2361	2992
October	2356	2448	3069
November	2370	2241	3113
December	2440	2180	3179
Unkown	NA	NA	219

The same analysis can be performed using the homicide rate as measurement. Tendencies in the different sources are the same, but now we can estimate the range from the minimum homicide rate registered at 1.62 homicides per 100,000 people in April according to the SSCP interinstitutional group and the maximum at 2.48 in August according to INEGI report by date of register.

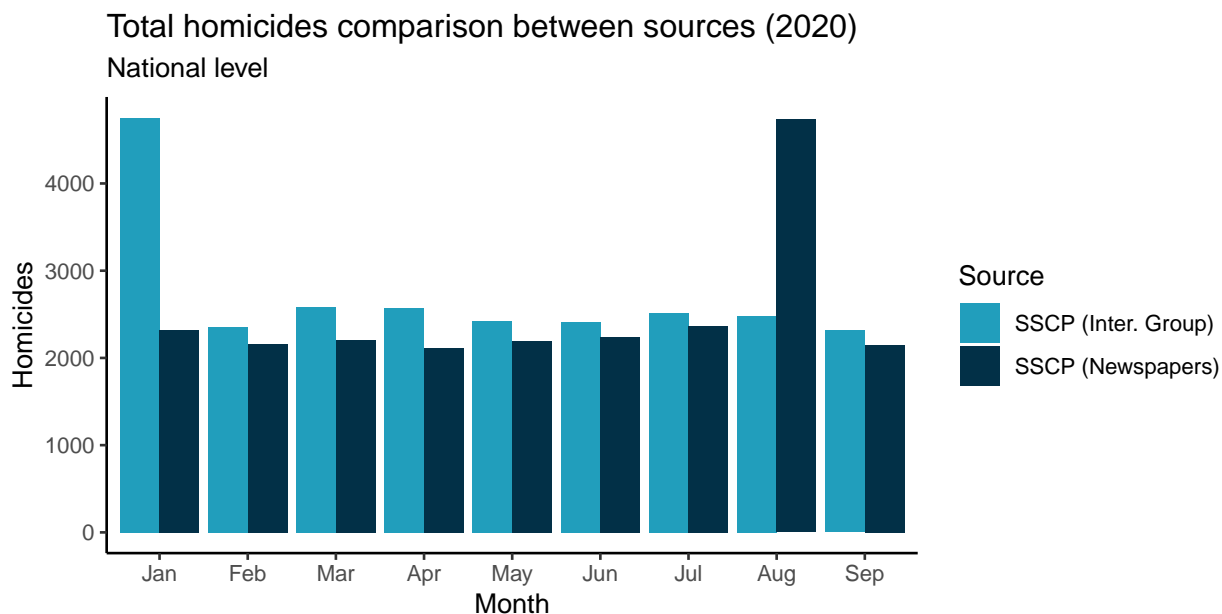


Month	SSCP (Inter. Group)	SSCP (Newspapers)	INEGI (Ocurrence)
January	NA	1.79	2.39
February	NA	1.77	2.32
March	NA	1.73	2.29
April	1.62	1.78	2.3
May	1.89	1.92	2.41
June	2.02	2	2.45
July	1.91	1.97	2.48
August	1.96	1.94	2.49
September	1.89	1.87	2.38
October	1.87	1.94	2.44
November	1.88	1.78	2.47
December	1.94	1.73	2.52
Unkown	NA	NA	0.17

National level homicides in 2020

As mentioned at the beggining of the document, INEGI has not published any figures for 2020. That is why we can only compare the two sources from the SSCP. As show in the figure, each month the Interinstitutional group consistently reports highest numbers than the newspapers. In the months from January to September, the Interinstitutional group has reported almost 2,000 more deaths in the present year.

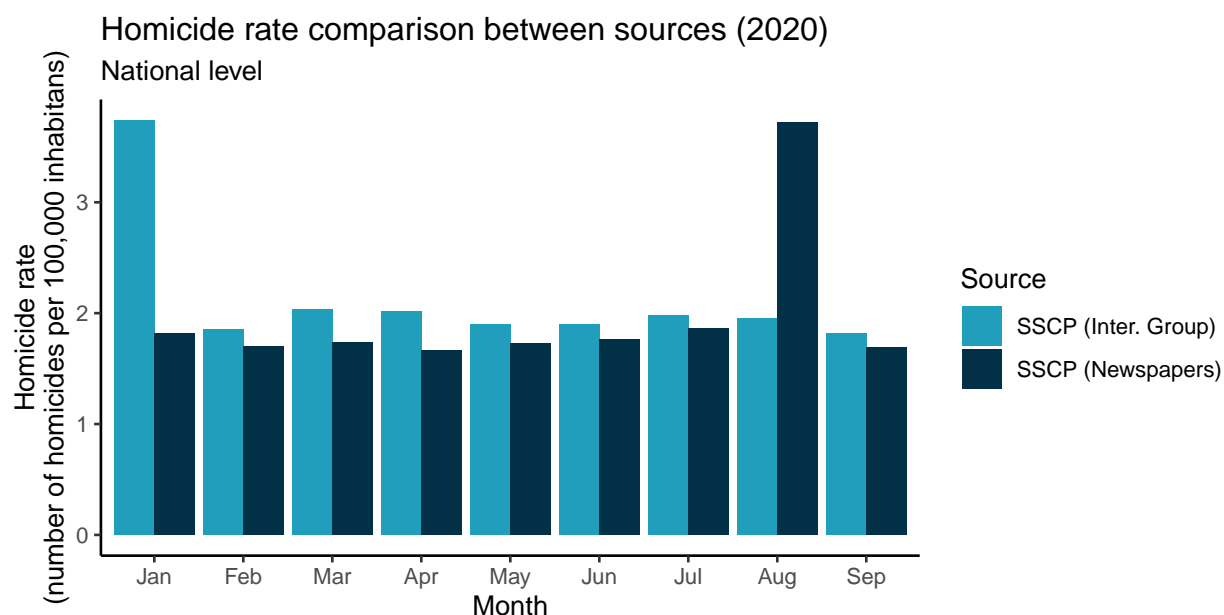
Source	Total homicides reported in 2020
SSCP (Inter. Group)	24414
SSCP (Newspapers)	22490



Source: Own elaboration with data from INEGI and SSPC, retrieved from:
<http://www.informeseguridad.cns.gob.mx/> and
<https://www.inegi.org.mx/programas/mortalidad/?ps=microdatos>

Month	SSCP (Inter. Group)	SSCP (Newspapers)
January	4754	2316
February	2352	2164
March	2585	2207
April	2572	2111
May	2423	2197
June	2413	2241
July	2519	2368
August	2481	4734
September	2315	2152

Finally, we replicate the analysis for 2020 with data from the SSCP using homicide rate as the unit of measurement.



Source: Own elaboration with data from INEGI and SSPC, retrieved from:
<http://www.informeseuridad.cns.gob.mx/> and
<https://www.inegi.org.mx/programas/mortalidad/?ps=microdatos>

Month	SSCP (Inter. Group)	SSCP (Newspapers)
January	3.74	1.82
February	1.85	1.7
March	2.03	1.74
April	2.02	1.66
May	1.9	1.73
June	1.9	1.76
July	1.98	1.86
August	1.95	3.72
September	1.82	1.69

References

1. Carlos Galindo AH, Manuel Rodríguez J. Mapas y tendencias de los homicidios en México. *Temas estratégicos*. 2018;(54). <http://www.bibliodigitalibd.senado.gob.mx/handle/123456789/3833>
2. Galindo C. Homicidios: Cifras y fuentes oficiales. *Nota estratégica*. 2016;(1). <http://bibliodigitalibd.senado.gob.mx/handle/123456789/3171>
3. INEGI. Mortalidad. Defunciones registradas, 2019. Published online 2020. <https://www.inegi.org.mx/programas/mortalidad/?ps=microdatos>
4. SSCP. Informe seguridad. Published online 2020. <http://www.informeseguridad.cns.gob.mx/>