

# Map of violent deaths<sup>1</sup>

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## Introduction

ON THE OCCASION of the publication of the 4<sup>th</sup> Map of Violence (Waiselfsz, 2004), released in 2004, a new phenomenon called our attention: where, prior to 1999, the dynamic hubs of violence were located in the large state capitals and metropolitan regions, figures from that year onwards indicated a leveling-off in these areas and a shift in the dynamic to the countryside, where violence continued to grow at a higher rate than before. However, as this was a very recent phenomenon (based on only three years' worth of data, up to 2002), there was a chance it was nothing more than a mere fruit of circumstance.

However, the compilation and publication of the 2005 *Mapa da violência de São Paulo* (Map of violence in São Paulo- Waiselfsz & Athias, 2005) presented further evidence of the phenomenon, which was later confirmed in the *Mapa de violência 2006* (Waiselfsz, 2006). Both studies verified stagnation in the growth of violence in the large cities, at least in those of greatest demographic weight, such as São Paulo, and a continued upturn in violence in the countryside towns.

It is well documented that we are in the midst of a nationwide process of economic decentralization and de-concentration, with the emergence of new hubs of growth in the state interiors, the result of “a specific territorial dynamic that is still not fully understood, but which probably involves such aspects as regional identity, an atmosphere favorable to entrepreneurial spirit, the existence of public or private networks and the allure of the cultural and natural environment” (Abramovay, 1999). This same territorial dynamic is also impacting upon the geographic distribution of violence across the country, which created the need for a more immediate snapshot of the territorial distribution of violence throughout the Brazilian municipalities, which is precisely the objective of this present work.

However, there was a second reason for embarking on this present study, even more pressing than the first. During the compilation of the *Mapa da violência de São Paulo* we saw ample proof of the enormous relevance of municipal participation and initiatives in overcoming problems of violence. Effectively, the main impetus behind this study was the realization that São Paulo was the only Brazilian state that had succeeded in obtaining a systematic and significant reduction in levels of violence during this last quinquennium. Arriving at an understanding of the causes and mechanisms behind this

improvement struck us as a valuable opportunity to identify an important example to be followed in other states and realities. It soon became clear that the creation of a Metropolitan Public Security Forum in 2001 by the 39 municipal town councils in the Metropolitan Region and the Executive Secretary of a powerful civil society organ, the São Paulo Against Violence Institute, was one of the key explanations for the systematic drop in rates across the various categories of violence in Metropolitan São Paulo. Measures such as wider policing, the implementation of dry laws and other preventive and organizational initiatives taken from this date on was the main reason behind this reversion in the growing trend of violence experienced throughout the State up to 1999.

For these reasons, getting down to the municipal figures, despite the enormity of the task of covering all 5,560 municipalities nationwide, represented a gigantic, but necessary challenge if we really wished to engage the municipal authorities and structures of society in tackling this plague, which, in the current Brazilian context, exacts a death toll far greater than traditional epidemics and pandemics.

### **Technical notes**

Continuing with the same conceptual thread followed in compiling earlier maps, we based our work around the understanding that violence exists wherever “in any situation of interaction, one or various agents acts in such a manner as directly or indirectly, on a large scale or small, causes harm or damage to one or more individuals, in any of the various possible degrees, be it against their physical or moral integrity, possessions, or symbolic/cultural participations” (Michaud, 1989).

Defining youth is no easy task either. The term can take on various connotations depending on the interests of each area of knowledge or project focus. The simplest alternative is to establish a cut-off age. However, even here there are controversies as to where to draw the line under youth. This document will follow the definitions attributed by the Pan-American Health Organization and World Health Organization (Opas/WHO), according to which adolescence and youth are distinguished by their physiological, psychological and sociological specificities. For Opas/WHO (1985), adolescence is a fundamentally biological process during which there is accelerated cognitive development and personality structuring. The period covers the ages of ten to nineteen years of age, divided into the phases of pre-adolescence (ten to fourteen) and adolescence properly speaking (fifteen to nineteen). Youth, on the other hand, is understood as an essentially sociological category that concerns the individual’s process of preparation to assume an adult role in society, both on the levels of family and profession, and can be said to last until the age of twenty-four.

We are yet to explain why violent mortality should be used as an indicator for the general level of violence in a society. Two sets of arguments

justify the use of violent mortality rates and an indicator for violence in general. Firstly, violence, as defined above, covers a significantly wider range of behaviors than death by violent means alone. Not all violence, nor even all acts of aggression, necessarily leads to the death of one or more of the protagonists. However, death does reveal, per se, violence at its most severe. Just as the virulence of an epidemic is often measured by its death toll, so too is the general intensity of the various types of violence present in society.

Secondly, there simply aren't many alternatives. The use of police records as a measure for various forms of violence has an extremely limited reach, as proved by a study conducted in the Distrito Federal (the Brazilian capital) (Weiselfisz, 1998). In the case of physical violence, only 6.4% of youths filed complaints with the police. In the case of theft/mugging, the percentage dropped to 4%. Traffic-related violence was only reported in 15% of cases.

In the case of mortality rates, however, we have the Ministry of Health's Mortality Information Subsystem (SIM), a centralized database of the death certificates issued nationwide.

The Health Ministry implanted the Mortality Information Subsystem in 1979 and its database has provided the data from which this report was drafted.

As per the existing Brazilian legislation (Law no. 015 of December 31, 1973, amended by law no 6216 of June 30, 1976), no burial can be conducted without the issuance of a death certificate. This registration must be signed by a doctor, or, should this prove impossible for whatever reason, by two qualified individuals who witnessed or certified the death.

The certificate normally registers such information as age, gender, civil status, profession, nationality and place of residence. The law also determines that the certificate be issued "at the place of death", i.e. where the event actually took place. In a bid to isolate the areas or locations that "produced" violence, the present work availed of this particular piece of data, the place of occurrence. However, this raises another problem for which the current format of the death certificate leaves no room for a solution, namely cases where the location of the original incident differs from the actual location at time of death. People injured in "incidents" and taken to hospitals in other municipalities or even states are registered as having passed away at these "places of occurrence".

From the point of view of this study, another important item of information demanded by the legislation is cause of death. Prior to 1995, the SIM classified causes of death according to the chapters of the ninth revision of the International Classification of Diseases (ICD-9). From that year forth the Ministry of Health adopted the tenth revision (ICD-10).

The aspects of interest to the present study contained in the ICD-10 surround what chapter XX classifies as "external causes of morbidity and mortality". When registering a death by external causes (accidents, poisoning,

fire, drowning, etc.) both the nature of the injury and the circumstances that occasioned it must be certified. As such, in codifying such deaths, the basic cause is cited, understood as the type of fact, violence or accident that caused the injury that led to the individual's demise. Among the causes of death established by the ICD-10, we find the following:

- **Homicides**, which correspond to all events under the categories X85 to Y09, generically entitled "Assault" and defined as injuries inflicted by another person with intent to injure or kill, by any means.

- **Death by firearms discharge**, referred to throughout this text simply as firearms. This encompasses all deaths, whether accidental, inflicted by third parties, intentionally self-inflicted or by other unspecified intent, caused by firearm discharge. Included in this are the uses of firearms covered in categories W32 to W34, under death by accidental injury; X72 to X74, under intentional self-harm; X93 to X95, under assaults; and Y22 to Y24, under events of undetermined intent.

In addition to working with the absolute numbers (number of deaths in any given year), annual rates per hundred thousand people<sup>2</sup> were also used in order to better compare the rates in municipalities of different sizes.

Another matter that warrants some clarification is that of the criteria used to discriminate between the categories on the geo-referenced maps. We opted to work with six categories in order to give sufficient visual amplitude to the maps and avoid excessive dark blotches. After various simulations, the following schema was adopted:

(a) As in each of the four series mapped – total and juvenile homicides and total and juvenile deaths by transport accidents – there were many municipalities with a value of zero, i.e., no registered deaths in these categories. Hence the first category took shape, which covers 30% of the municipalities studied, with values of zero or close to zero. As there were cases in which the percentage of nullity (no incidents) was above 30%, this reduced the remainder in the category immediately following. In relation to juvenile homicides, as the volume of municipalities with values of zero or close to zero was roughly half, one category had to be eliminated, cutting the total down to five.

(b) This left four groups immediately above, each containing roughly 15% of the municipalities (834 each).

(c) The last category contains the remaining 10% of the municipalities – 556 in total. These are where the highest rates were encountered, as represented on the maps by the darkest blotches.

This technique proved relevant, as it allows one to visualize the spatial distribution of the critical municipalities, which is very important to public policymaking. For example, the 10% of municipalities with the highest juvenile homicide rates account for 80% of the total of juvenile homicides nationwide – information that makes it possible to deploy policies more accurately.

It cannot be denied that the information made available through the death registry is still subject to a series of limitations and criticisms, as recognized by the SIM itself (SIM/Datasus/MS, 1995), and by other authors working with the theme (Mello Jorge, 1998; Souza et al., 1996).

The first of these limitations, which the SIM freely admits, is the sub-register. This sub-register is partly due to the occurrence of burials without the required death certificates, which brings down the number of declared deaths, though it also derives from the System's incomplete coverage, especially in the North and North-eastern regions, which sees data accuracy diminish the further one goes from the urban centers and depending on the size and dispersion of the municipalities. The SIM (SIM/Datasus/MS, 1995) has itself stated that the figures presented in 1992 probably account for only 80% of nationwide deaths. However, the evidence suggests that this shortfall affects the figures for natural deaths more so than those for violent mortality.

Not only the quantity, but also the quality of the data provided has been subject to criticism, chiefly in what concerns deaths occurring without medical assistance, leading to incorrect certification of the causes and/or injuries, and inadequacy in the way the certificates are filled out. Despite these limitations, there is widespread agreement that, while the system may need improvement, it is nonetheless enormously important.

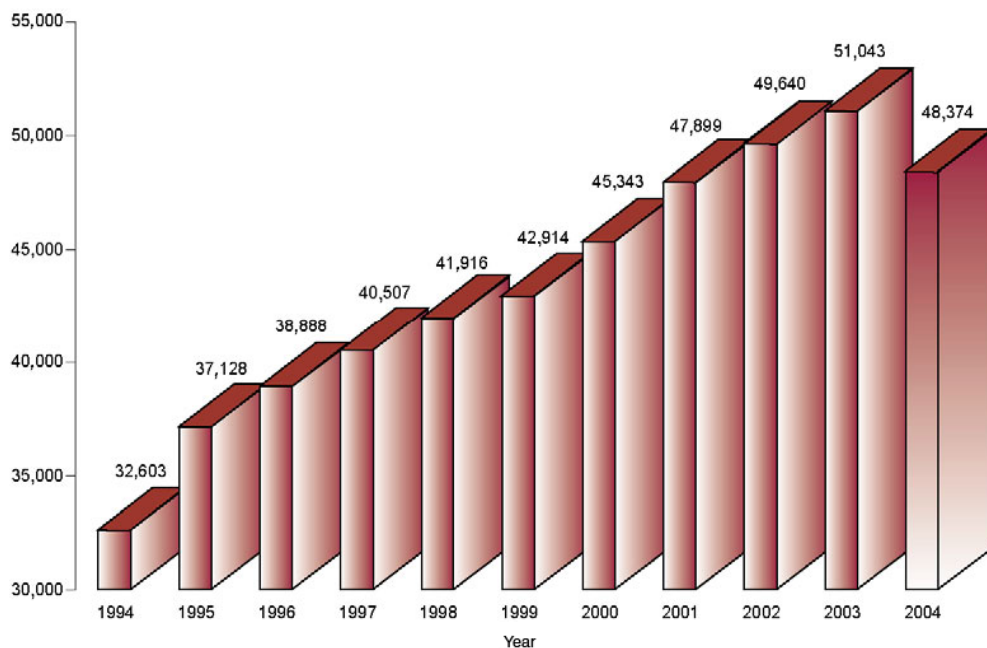
Inter-census estimates provided by Datasus, based on the Census Bureau's populational estimates, are used to calculate the mortality rates. However, these official inter-census estimates are not above a certain margin of error.

### **Homicides per total population**

As shown in the recent *Mapa da violência 2006* (Waiselfisz, 2006), the total number of homicides registered by the SIM during the decade 1994/2004 rose from 32,603 to 48,374, an increase of 48.4%, far above the rate of population growth, which was 16.5% for the same period.

Graph 1 clearly shows that the number of homicides saw frighteningly regular growth up to 2003, with annual increments of as much as 5.1%. However, this trend reverted significantly in 2004, with a 5.2% drop over figures for 2003, a fact directly attributable to the disarmament policies implemented that year.

Nevertheless, even considering the impact of the disarmament policies introduced in 2004, the rates of violent death remained extremely high. On the international level, of the 84 countries surveyed, Brazil, with its rate of 27 homicides per hundred thousand inhabitants, comes fourth in the ranking, behind only Colombia in South America and with rates similar to those of Russia and Venezuela. The homicide rates for 2004 are still thirty to forty times higher than those for countries like Britain, France, Germany, Austria, Japan and Egypt.



Graph 1 – Number of homicides – Brazil, 1994/2004

Considering the states in the federation, we can see that the distribution of the homicide rate nationwide is extremely unbalanced.

The most extreme cases are in Pernambuco, Espírito Santo and Rio de Janeiro, with roughly 50 homicides per hundred thousand inhabitants, while states like Piauí, Maranhão, Rio Grande do Norte and Santa Catarina have rates as low as 11 or 12 homicides per hundred thousand inhabitants, in other words, approximately five times fewer violent deaths.

In terms of policymaking, it is useful to take into account some of the characteristics of homicidal violence detected in previous studies:

1. Homicide victims are usually young. The homicide rates (per hundred thousand) established for the various ages and age groups (Table 2) confirm this and other significant facts.

(a) Homicide figures are highest among the youth bracket (fifteen to twenty-four years of age), specifically between the ages of twenty and twenty-four, with some 65 homicides per hundred thousand.

(b) The most frightening growth rate is that detected among legal minors (fourteen to seventeen years of age), with a peak at the age of fourteen. Homicides grew 63.1% in this bracket during the decade 1994/2004.

(c) The highest rates of increase for the decade were in the fifteen to twenty-nine year-old bracket, with rates far higher than those for other age groups.

Table 1 – Ranking of Federal Units in terms of homicides per total population. Brazil, 1994/2004

FU	Total Population		
	Position in		Rate in 2004
	1994	2004	
Pernambuco	5 <sup>th</sup>	1 <sup>st</sup>	50.7
Espírito Santo	2 <sup>nd</sup>	2 <sup>nd</sup>	49.4
Rio de Janeiro	1 <sup>st</sup>	3 <sup>rd</sup>	49.2
Rondônia	6 <sup>th</sup>	4 <sup>th</sup>	38.0
Distrito Federal	4 <sup>th</sup>	5 <sup>th</sup>	36.5
Alagoas	10 <sup>th</sup>	6 <sup>th</sup>	35.1
Mato Grosso	15 <sup>th</sup>	7 <sup>th</sup>	32.1
Amapá	3 <sup>rd</sup>	8 <sup>th</sup>	31.3
Mato Grosso do Sul	9 <sup>th</sup>	9 <sup>th</sup>	29.6
São Paulo	8 <sup>th</sup>	10 <sup>th</sup>	28.6
Paraná	16 <sup>th</sup>	11 <sup>th</sup>	28.1
Goiás	13 <sup>th</sup>	12 <sup>th</sup>	26.4
Sergipe	11 <sup>th</sup>	13 <sup>th</sup>	24.4
Pará	19 <sup>th</sup>	14 <sup>th</sup>	22.7
Minas Gerais	25 <sup>th</sup>	15 <sup>th</sup>	22.6
Roraima	7 <sup>th</sup>	16 <sup>th</sup>	22.6
Ceará	22 <sup>nd</sup>	17 <sup>th</sup>	20.0
Acre	12 <sup>th</sup>	18 <sup>th</sup>	18.7
Paraíba	20 <sup>th</sup>	19 <sup>th</sup>	18.6
Rio Grande do Sul	18 <sup>th</sup>	20 <sup>th</sup>	18.5
Amazonas	14 <sup>th</sup>	21 <sup>st</sup>	16.9
Bahia	17 <sup>th</sup>	22 <sup>nd</sup>	16.6
Tocantins	21 <sup>st</sup>	23 <sup>rd</sup>	16.4
Piauí	27 <sup>th</sup>	24 <sup>th</sup>	11.8
Maranhão	23 <sup>rd</sup>	25 <sup>th</sup>	11.7
Rio Grande do Norte	23 <sup>rd</sup>	26 <sup>th</sup>	11.7
Santa Catarina	24 <sup>th</sup>	27 <sup>th</sup>	11.1

Source: SIM/SVS/MS.

2. With few differences among the Federal Units, the vast majority of homicide victims are male (92.1%).

3. On average, the homicide rate increases 73.7% on weekends.

Table 2 – Homicide rates (per hundred thousand) per age group.  
Brazil, 1994/2004

Age Age group	Homicide Rate		
	1994	2004	Δ%
0 to 4 years	0.9	0.8	-2.4
5 to 9 years	0.6	0.7	15.8
10 to 14 years	2.1	2.8	37.0
10 years	0.5	0.5	6.5
11 years	0.8	0.5	12.5
12 years	1.6	1.8	11.8
13 years	2.5	2.8	11.6
14 years	5.0	8.2	63.1
15 to 19 years	29.0	39.8	37.1
15 years	11.3	18.0	59.6
16 years	21.0	31.3	48.6
17 years	30.9	43.4	40.3
18 years	39.9	49.7	24.6
19 years	45.8	55.8	21.9
20 to 24 years	47.9	64.9	35.6
20 years	46.8	65.1	39.1
21 years	49.2	66.7	35.6
22 years	49.6	65.9	32.9
23 years	47.8	63.5	32.8
24 years	48.5	65.4	34.9
25 to 29 years	42.8	57.4	34.2
30 to 34 years	37.4	41.4	10.8
35 to 39 years	31.7	34.0	7.4
40 to 44 years	27.1	28.7	5.9
45 to 49 years	22.5	23.8	6.1
50 to 59 years	9.5	11.0	15.6
60 to 69 years	9.0	9.9	9.6
70 years or more	8.6	9.0	4.3

Source: SIM/SVS/MS.



4. The homicide rate among blacks is far higher than among whites. While the rate for homicides per hundred thousand whites was 18.3 in 2004, it was 31.7 per hundred thousand blacks. This means that the black population suffered 73.1% more homicides than the white population. Only three Federal Units – Acre, Tocantins and Paraná – registered a higher proportion of victims among whites in 2004, while in the other 24 Federal Units, black victims predominated. In some cases, such as Paraíba and Alagoas, the disparity is very serious indeed, with the number of black victims superseding that of whites by something in the region of 700%. In other words, for each white victim in these states, eight black people are murdered.

### The maps

As mentioned earlier, in order to iron out the oscillations that might occur on the municipal level, we used the average homicide rates for the last three available years, from 2002 to 2004.

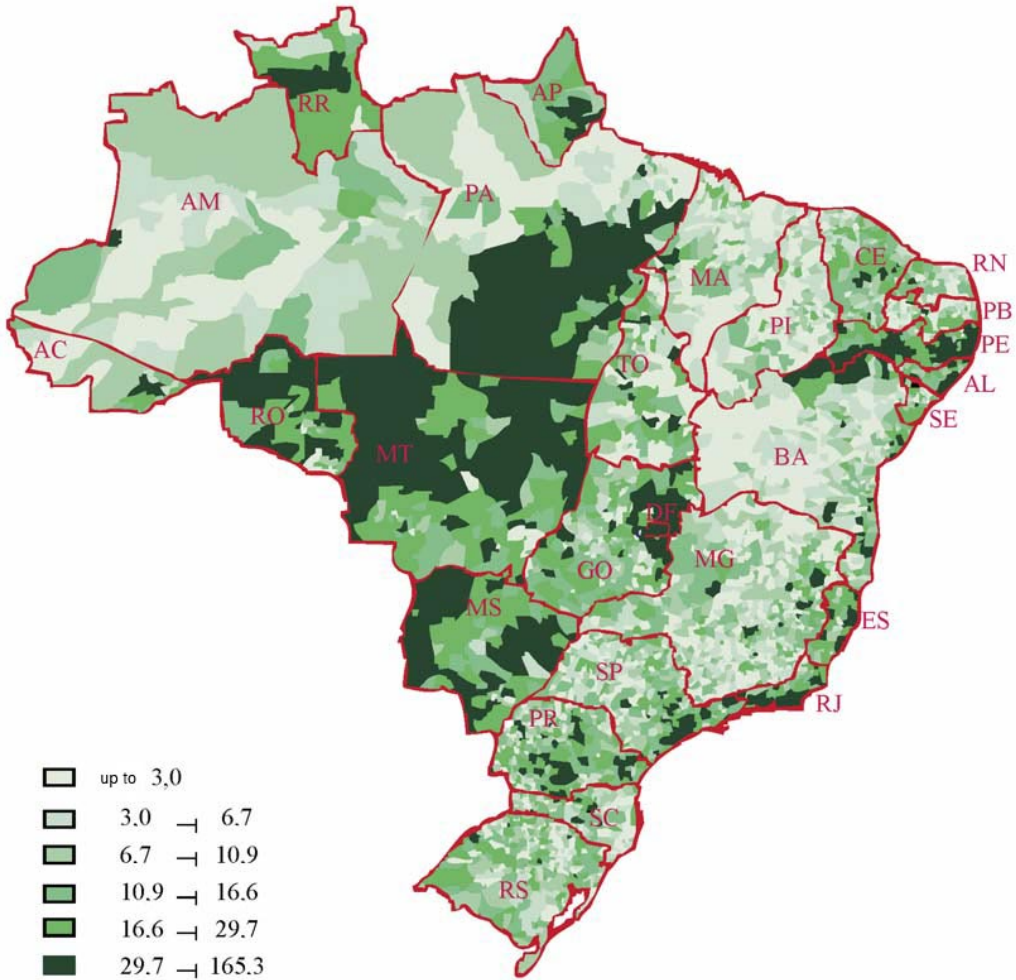
The categorization procedures already described allowed us to draw up six municipal categories from which to compile the maps:

- A first category consisting of zero or near zero rates, which accounts for approximately 30% of the municipalities, appears in the lightest shade on the map. These municipalities have rates of up to three homicides per hundred thousand inhabitants.
- Four subsequent categories represented by progressively darker colors, each encompassing roughly 15% of the municipalities and corresponding to areas with homicide rates of up to 6.7, 10.9, 16.6 and 29.7 deaths per hundred thousand inhabitants, respectively.
- A final category, the darkest color on the maps, representing the highest 10% of municipal homicide rates, ranging between 29.7 and 165.3 homicides per hundred thousand inhabitants.

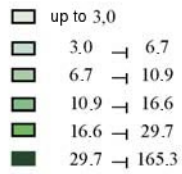
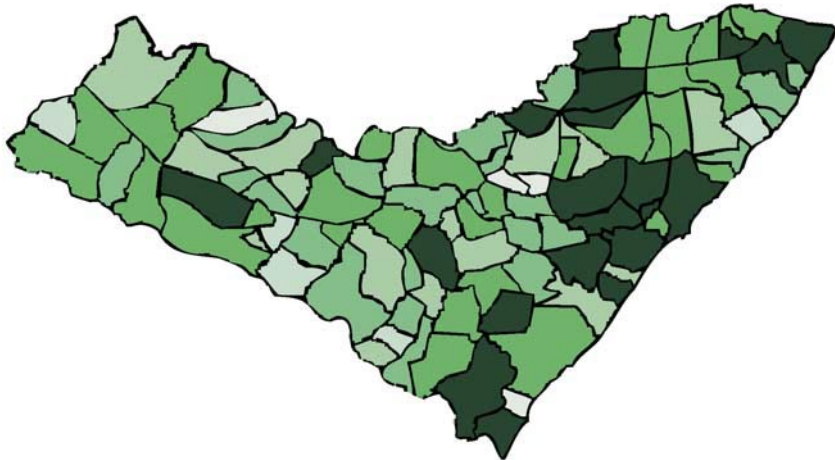
Box 1 – Categorization of average homicide rates per total population.

Categories	Municipalities	
	N	%
up to 3.0	1,675	30.1
3.0 – 6.7	826	14.9
6.7 – 10.9	833	15.0
10.9 – 16.6	842	15.1
16.6 – 29.7	828	14.9
29.7 – 165.3	556	10.0
<b>Total</b>	<b>5,560</b>	<b>100.0</b>

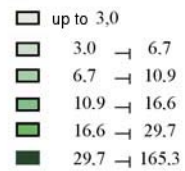
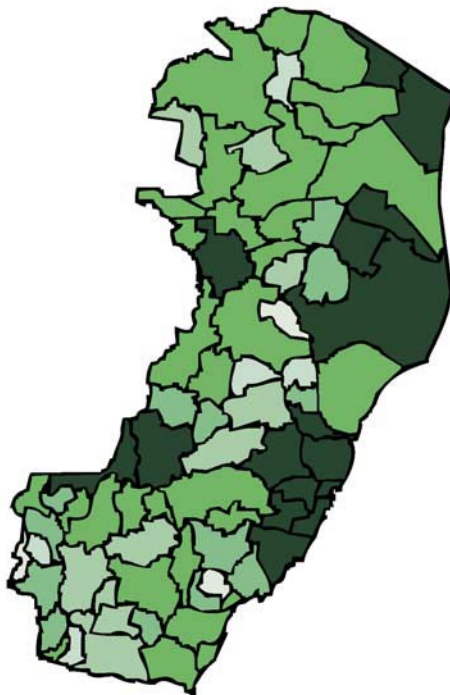
**Brazil**  
Average homicide rate 2002/2004  
Total population



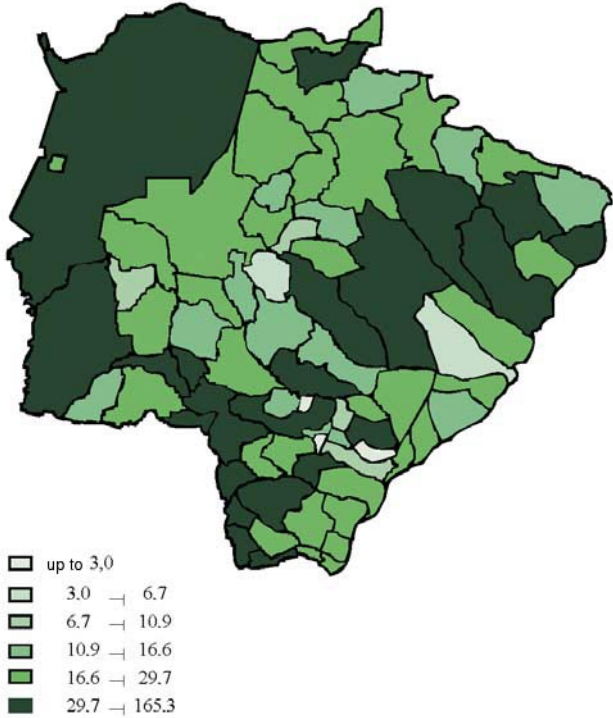
Alagoas - Average homicide rate 2002/2004 - Total population.



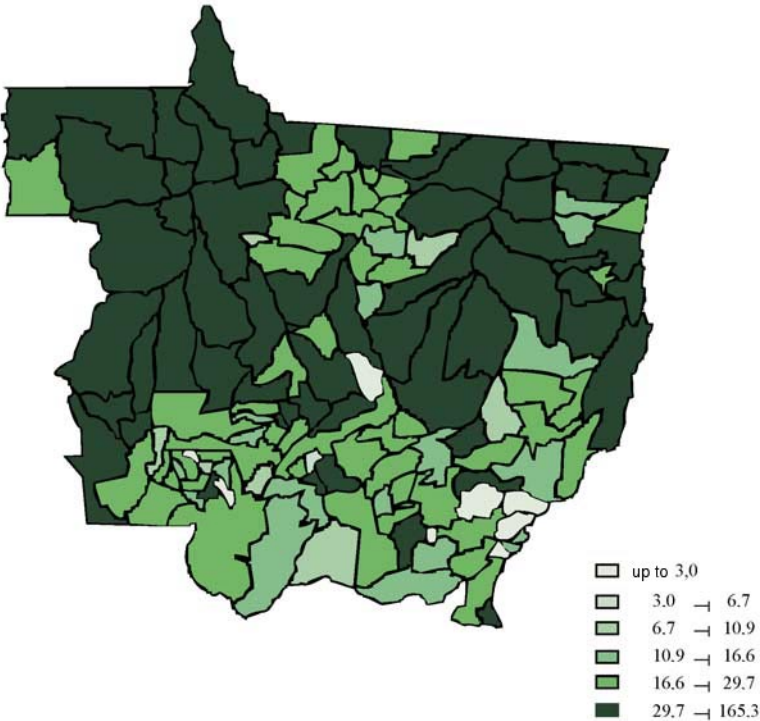
Espírito Santo - Average homicide rate 2002/2004 - Total population.



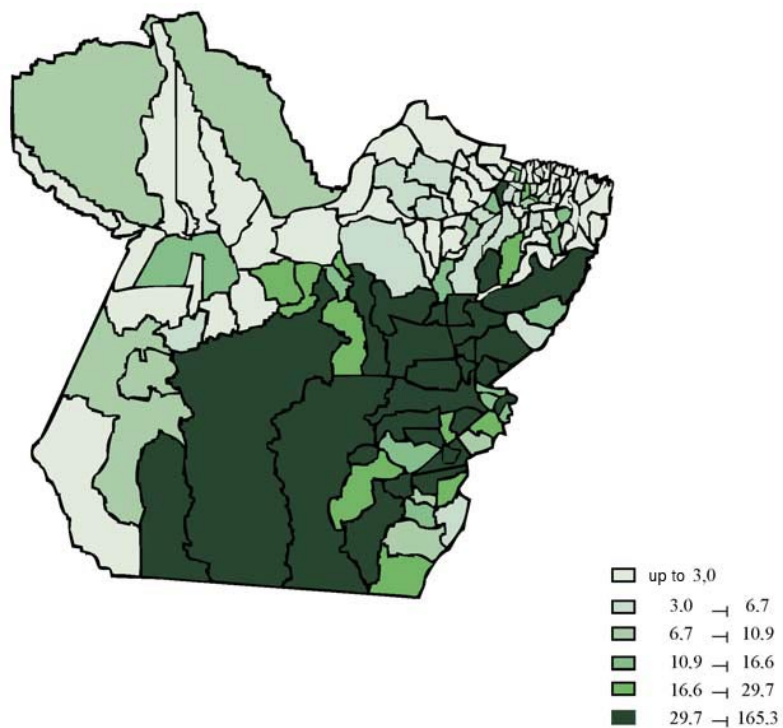
Mato Grosso do Sul - Average homicide rate 2002/2004 - Total population.



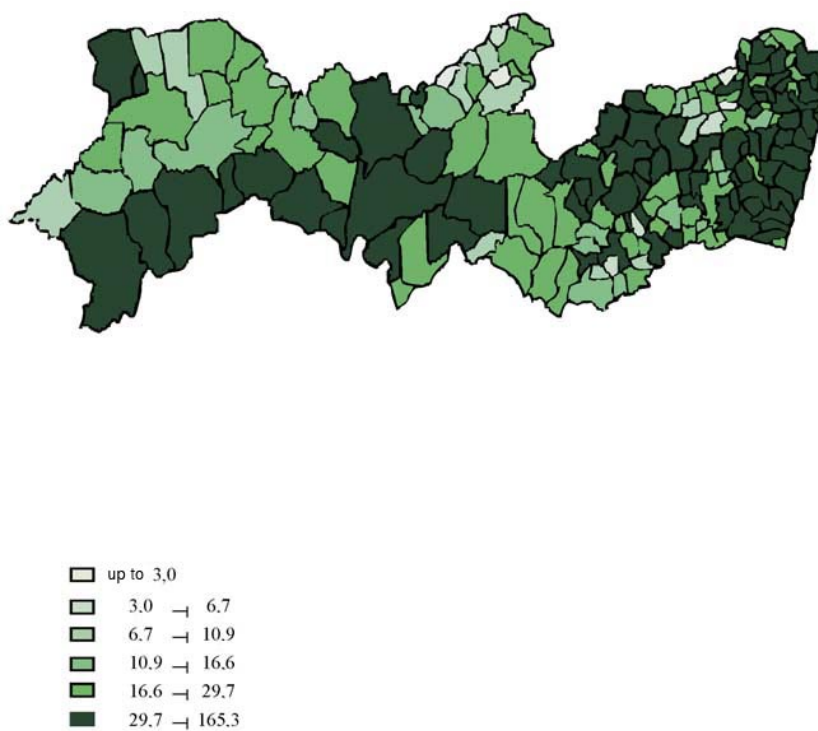
Mato Grosso - Average homicide rate 2002/2004 - Total population.



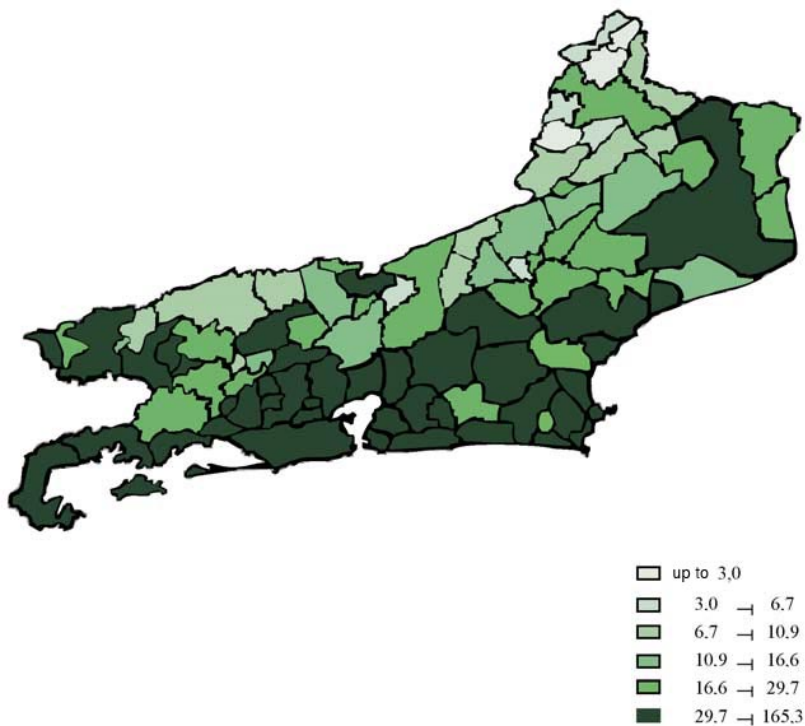
Pará - Average homicide rate 2002/2004 - Total population.



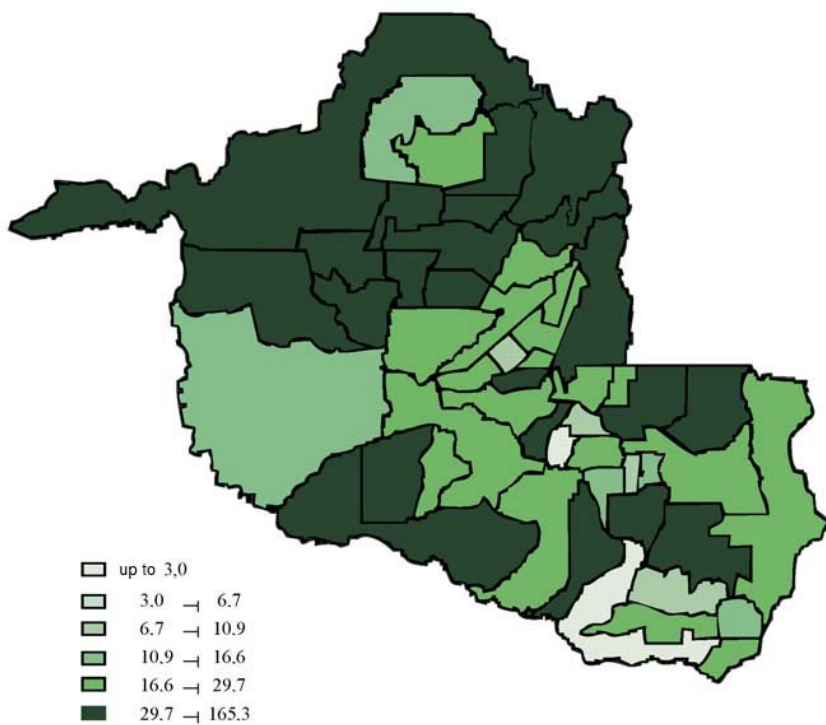
Pernambuco - Average homicide rate 2002/2004 - Total population.



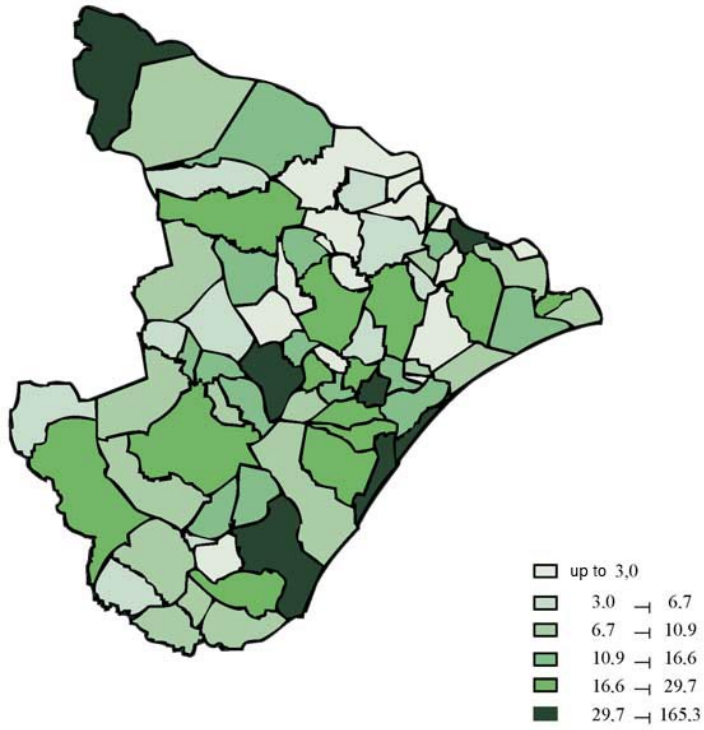
Rio de Janeiro - Average homicide rate 2002/2004 - Total population.



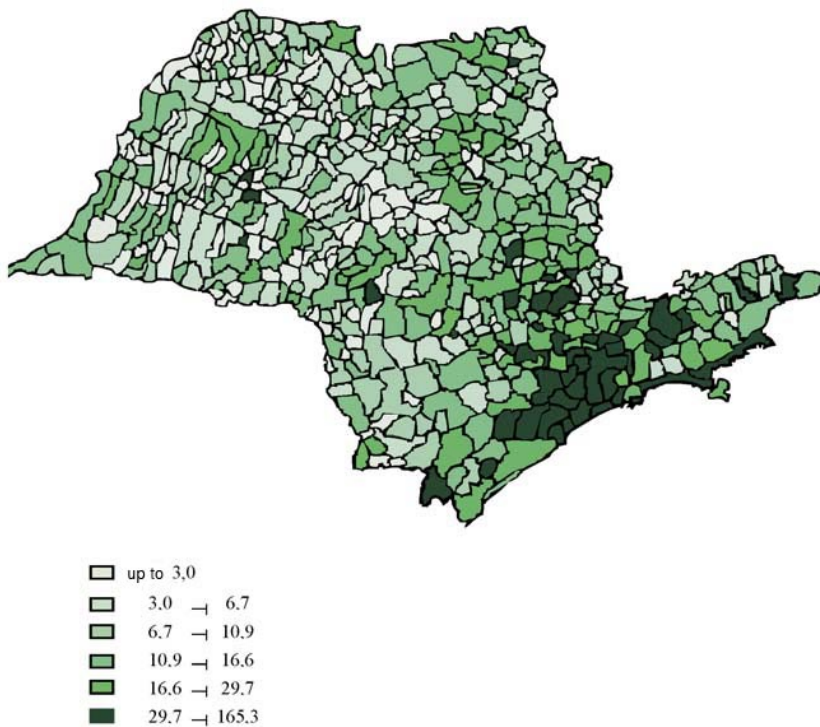
Rondônia - Average homicide rate 2002/2004 - Total population.



Sergipe - Average homicide rate 2002/2004 - Total population.



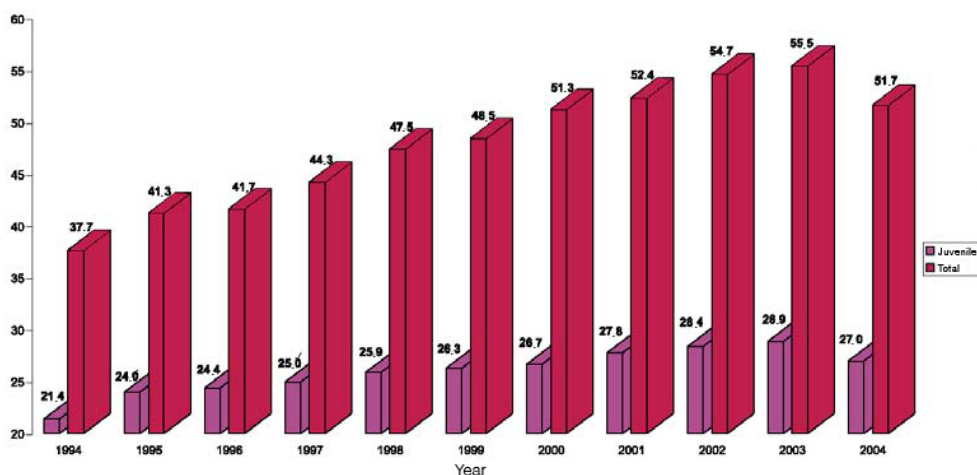
São Paulo - Average homicide rate 2002/2004 - Total population.



## Juvenile homicides

Between 1994 and 2004, homicides among the juvenile population rose from 11,330 to 18,599, a decennial increase of 64.2%, far above that for the total population; 48.4%.

In addition, it is important to note that the rate of increase in juvenile homicides in all of the regions of the country was higher than that for total population growth. This can be more clearly seen in Graph 2, which compares the annual homicide rates (per hundred thousand) for the total population and those for the juvenile population (between the ages of fifteen and twenty-four). First of all, one will note that the juvenile figures are far higher than those for the population as a whole, as was their growth-rate over the course of the decade.



Fonte: SIM/SVS/MS.

Graph 2 – Total and juvenile homicide rates. Brazil, 1994/2004.

If the overall Brazilian homicide rate can be considered very high in comparison with international averages, then the differences in relation to youth homicides become even more dramatic. Juvenile homicide rates in Brazil are as much as one hundred times higher than those for countries like Austria, Japan, Egypt or Luxemburg.

Once again, distribution across the national territory is totally unbalanced, ranging from extreme levels in Rio de Janeiro and Pernambuco, with over a hundred homicides per hundred thousand youths, to rates of under twenty per hundred thousand youths in states like Rio Grande do Norte, Maranhão or Santa Catarina.

Other significant facts and situations discovered by the study paint a very worrying picture:



- 39.7% of all youth deaths in 2004 were homicides. This percentage, which has seen accelerated growth in recent years, far outstrips the corresponding percentage for the total population, which is only 3%.

Table 2 – Ranking of Federal Units in terms of homicides per juvenile population. Brazil, 1994/2004

FU	Juvenile Population		
	Position in		Rate in 2004
	1994	2004	
Rio de Janeiro	1 <sup>st</sup>	1 <sup>st</sup>	102.8
Pernambuco	6 <sup>th</sup>	2 <sup>nd</sup>	101.5
Espírito Santo	5 <sup>th</sup>	3 <sup>rd</sup>	95.4
Distrito Federal	4 <sup>th</sup>	4 <sup>th</sup>	74.8
Amapá	2 <sup>nd</sup>	5 <sup>th</sup>	73.4
Alagoas	12 <sup>th</sup>	6 <sup>th</sup>	72.0
Paraná	18 <sup>th</sup>	7 <sup>th</sup>	59.9
Rondônia	7 <sup>th</sup>	8 <sup>th</sup>	58.3
São Paulo	3 <sup>rd</sup>	9 <sup>th</sup>	56.4
Mato Grosso do Sul	9 <sup>th</sup>	10 <sup>th</sup>	50.8
Goiás	16 <sup>th</sup>	11 <sup>th</sup>	47.7
Minas Gerais	24 <sup>th</sup>	12 <sup>th</sup>	46.7
Mato Grosso	23 <sup>rd</sup>	13 <sup>th</sup>	44.7
Roraima	8 <sup>th</sup>	14 <sup>th</sup>	41.6
Rio Grande do Sul	15 <sup>th</sup>	15 <sup>th</sup>	37.7
Acre	10 <sup>th</sup>	16 <sup>th</sup>	37.5
Pará	17 <sup>th</sup>	17 <sup>th</sup>	37.3
Sergipe	11 <sup>th</sup>	18 <sup>th</sup>	36.1
Ceará	21 <sup>st</sup>	19 <sup>th</sup>	34.6
Paraíba	19 <sup>th</sup>	20 <sup>th</sup>	31.7
Amazonas	13 <sup>th</sup>	21 <sup>st</sup>	30.6
Bahia	14 <sup>th</sup>	22 <sup>nd</sup>	28.4
Tocantins	22 <sup>nd</sup>	23 <sup>rd</sup>	24.0
Piauí	27 <sup>th</sup>	24 <sup>th</sup>	20.8
Rio Grande do Norte	20 <sup>th</sup>	25 <sup>th</sup>	19.4
Maranhão	26 <sup>th</sup>	26 <sup>th</sup>	19.1
Santa Catarina	25 <sup>th</sup>	27 <sup>th</sup>	18.6

*Source:* SIM/SVS/MS.

- In various states, such as Rio de Janeiro, Espírito Santo and Pernambuco, homicides are responsible for over half of all youth deaths.

- The increase in violent mortality in Brazil over the last decades can be entirely explained by the hike in homicides against youths. While juvenile homicide rates shot up from 30.0 in 1980 to 51.7 (per hundred thousand youths) in 2004, rates for the rest of the population dropped slightly from 21.3 (per hundred thousand) to 20.8 over the same period.

- To a greater or lesser degree, extremely high levels of juvenile homicide can be found in all of the units of the federation, with some cases presenting extreme disparities, such as Amapá, for example, where juvenile homicides are 284.4% higher than for the rest of the state population. The average juvenile homicide rate (51.7 per hundred thousand youths) is 148.4% higher than for the rest of the population (20.8 per hundred thousand).

- Following the trend identified among total homicides, though with lesser intensity, black youths account for the majority of juvenile homicide victims (83.1%).

- Higher than the figures for the total population, 96.7% of the victims of youth homicides are male.

- Juvenile homicides rise by 80% on weekends against weekday figures.

### **Firearm deaths**

If the issue of mortality in general and of violent mortality in particular have warranted growing attention in recent years, with a significant number of studies being conducted, the same has not occurred for the question of firearms in Brazil. Only a handful of studies have attempted to quantify or qualify the phenomenon, which has drawn attention and reflection in various national and international fora. In addition, the Disarmament Statute, promulgated on December 22 2003, the National Disarmament Campaign launched in July 2004, the discussions that preceded the Disarmament Referendum of 2005, and the referendum itself, held on October 23 of that year, are national highlights that indicate the mounting relevance attributed to the problem. However, this growth was not accompanied by a concomitant methodological and conceptual deepening of the theme.

A study from 2005 (Waiselfisz, 2005) concluded that some 550 thousand people died as a result of firearms between 1979 and 2003.

The chapter on death by firearm discharge encompasses deaths by homicide committed using firearms, suicides using firearms, accidents involving firearms and firearm-related deaths of undetermined intent, that is, without knowing whether the death was accidental, self-inflicted or caused intentionally by third parties. In 2004 Brazil registered 37,113 deaths under this chapter: 92.1% being homicides; 3.3% suicides; 0.5% accidents involving firearms; and 4% of undetermined intent. With these figures, the Brazilian rate of deaths caused by firearm discharge rose to 20.7 per hundred thousand inhabitants, bringing Brazil into second place, behind Venezuela, in the ranking of the 64 nations that keep records on the theme.

The Southeast region, in virtue of the high rates in Espírito Santo and Rio de Janeiro, is the regional leader, but it is the states of Rio de Janeiro and Pernambuco that top the tragic ranking for firearm-related deaths.

## Notes

- 1 This text was especially edited by Estudos Avançados from a study by Julio Jacobo Waiselfisz entitled *Mapa de violência dos municípios brasileiros*. The full study, covering 191 pages, was published in 2007 by the Organização dos Estados Ibero-Americanos para a Educação, a Ciência e a Cultura – OEI (Education, Science and Culture Organization of the Iberian-American States), with the support of the Brazilian Ministry of Health. The full text is available free of charge from the site [www.oei.org.br](http://www.oei.org.br)
- 2 Rates per hundred thousand inhabitants, when dealing with the total population, and per hundred thousand youths, when referring to the juvenile population.

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*ABSTRACT* – As a continuation of the *Maps of violence* series, the present study focuses on the situation of violent mortality - homicides and firearm-related deaths - in all 5.560 Brazilian municipalities, using the SIM's (Mortality Information Subsystem of the Ministry of Health) database. Due to possible temporal oscillations of small municipalities, the average of the number of incidents registered from 2002 to 2004 was used as an indicator. The evidences found in the study allowed us to notice that a spatial reconfiguration process of homicidal violence is taking place in the country: some municipalities arose with extremely high violence rates - higher than those of the capitals and metropolitan regions.

*KEYWORDS* – Violence, Homicides, Violent Mortality.

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Translated by Anthony Doyle. The original in Portuguese is available at [http://www.scielo.br/scielo.php?script=sci\\_issuetoc&pid=0103-401420070003&lng=pt&nrm=iso](http://www.scielo.br/scielo.php?script=sci_issuetoc&pid=0103-401420070003&lng=pt&nrm=iso).

Received on 8.22.2007 and accepted on 8.30.2007.