ARGENTINA

During 2017, 5,611 road fatalities were recorded, representing a 0.5% increase when compared to 2016. The mortality rate was 12.7 deaths per 100,000 inhabitants. The number of road deaths for the period 2010-2017 shows an upward trend, which could be partly explained by improvements in data collection. Argentina has developed a new data collection system which is already being used by 16 provinces (out of 24). For the first time it was possible to estimate the share of different user groups in total road deaths using police reports as the main source of information. These data reveal that motorcyclists are the main traffic casualties and represent 40% of all road deaths.

Trends

Argentina registered a small increase in the number of road deaths in 2017. According to recorded data, 5,611 persons lost their lives in traffic crashes in 2017, representing a 0.5% increase on 2016. In 2016, 5,582 road deaths were recorded.

Since 2010, the number of road fatalities has shown an upward trend, part of which might be due to data collection improvements.

The mortality rate, i.e. the number of traffic deaths per 100,000 inhabitants, has been stable between 12 and 13 in the last ten years. In 2017, 12.7 road deaths per 100,000 inhabitants were recorded, which is the second highest value since 2010 after the 2016 mark which was 12.8. The fatality risk, measured as road fatalities per 10,000 registered vehicles, was 2.4 in 2017. This represents a decrease of 0.6% compared with the year 2016, when the rate of deaths to registered vehicles stood at 2.6. Still within IRTAD countries, the mortality rate and the fatality risk are among the highest.
The picture for **fatalities by road user group** is characterised by a very high share of motorcyclists, who represent 40% of the total traffic death toll (ANSV, 2018a). Due to changes in data collection procedures, it is not possible to build a historical evolution. However, health records suggest that the growing share of motorcyclists among road casualties is the result of a process that has been going on at least for the last decade (ANSV, 2018b).

For the first time in history, Argentina has been able to break down the number of deaths by user group, using police reports as the main source of information and health data as a secondary one (the latter only being used by some jurisdictions). Car occupants are the second group the most affected by road crashes, representing 30% of all road deaths. The share of pedestrians killed (11%) is relatively low compared to other countries in the region.

Source: vehicle fleet data come from the National Registry of Motor vehicles (DNRPA). Data on the motorised two-wheelers fleet is currently under revision.

Note: Argentina did not publish official road crash statistics for 2015.
Figure 2. Road fatalities by road user group in percentage of total, 2017

Note: Excludes data from the Province of Córdoba.

Road deaths by age group in 2017 showed that young people and young adults are the most affected by road crashes. In 2017, 57% of all road deaths were between 15 and 44 years old. The 15-24 age group alone represented 23% of traffic fatalities.

Figure 3. Road fatalities by age group, 2017
Percentage of total

Note: Excludes data from the Province of Córdoba.

Analysis of fatalities by road type shows that in 2017, 91% of all reported road crashes occurred inside urban areas, accounting for 54% of fatalities. Non-urban areas accounted for 39% of fatalities. The number of fatalities has increased by 30% on rural roads between 2016 and 2017. The safety of pedestrians, cyclists and motorcyclists in urban areas continues to be a major challenge.
Economic costs of road crashes

For the first time in history, Argentina has an official estimate of the social cost of road crashes, which amounted to around USD 9.42 billion in 2017, or 1.7% of GDP in 2017. The methodology chosen to estimate crash costs combines the human capital approach with an estimate of the statistical value of life to take into consideration the grief and pain caused by premature death and serious injuries. More information can be found at: https://www.argentina.gob.ar/seguridadvial/observatoriovial.

Table 1. Estimated cost of road crashes, 2017

<table>
<thead>
<tr>
<th>Item</th>
<th>Fatalities</th>
<th>Serious injuries</th>
<th>Slight injuries</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical costs</td>
<td>0.20</td>
<td>5.96</td>
<td>2.31</td>
<td>8.47</td>
</tr>
<tr>
<td>Productivity loss</td>
<td>864.88</td>
<td>22.61</td>
<td>3.43</td>
<td>890.91</td>
</tr>
<tr>
<td>Human costs</td>
<td>8 316.80</td>
<td>175.15</td>
<td>-</td>
<td>8 491.95</td>
</tr>
<tr>
<td>Property damage costs</td>
<td>1.17</td>
<td>1.79</td>
<td>13.58</td>
<td>16.45</td>
</tr>
<tr>
<td>Administrative costs</td>
<td>9.19</td>
<td>1.66</td>
<td>0.35</td>
<td>11.20</td>
</tr>
<tr>
<td>Total</td>
<td>9 192.24</td>
<td>207.07</td>
<td>19.64</td>
<td>9 418.98</td>
</tr>
<tr>
<td>Total as % of GDP</td>
<td></td>
<td></td>
<td></td>
<td>1.7</td>
</tr>
</tbody>
</table>

Behaviour

The behaviour of road users is an important determinant of a country’s road safety performance. Unfortunately, there are not yet local studies reflecting the influence of
each risk factor on the occurrence of road crashes. However, international evidence suggests that **speed**, and especially excessive or inappropriate speed, could be an important cause explaining both occurrence rates and injury severity.

Maximum speed limits are summarised in the following table.

<table>
<thead>
<tr>
<th>Table 2. Passenger car general speed limits by road type, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urban roads</strong></td>
</tr>
<tr>
<td>Main roads</td>
</tr>
<tr>
<td>Residential streets</td>
</tr>
<tr>
<td><strong>Interurban high speed roads</strong></td>
</tr>
<tr>
<td>Single carriageway</td>
</tr>
<tr>
<td>Expressway/motorway</td>
</tr>
</tbody>
</table>

The national traffic law prohibits driving while having a **blood alcohol concentration** (BAC) above legal limit, or “having consumed illegal or legal **drugs** that reduce the ability to drive”. The maximum authorised BAC level is 0.5 g/l for car drivers, 0.2 g/l for motorcyclists and 0.0 g/l for professional drivers.

Since 2016, the National Road Safety Observatory collects data from different jurisdictions that carry out breath tests on drivers to detect traffic law violations. A new study based on a sample of more than 48 000 drivers, shows that approximately 9.4% of drivers have a BAC level above the maximum authorised level. This proportion is higher for young drivers (11.2% for 16-24 year-olds and 12.7% for 25-34 year-olds). Men are more likely than women to drive with a BAC above the legal limit (9.9% vs. 5.2%). Motorcyclists show a higher prevalence of positive cases than car drivers (23.1% vs. 8.7%). More information can be found at: [https://www.argentina.gob.ar/seguridadvial/observatoriovial](https://www.argentina.gob.ar/seguridadvial/observatoriovial).

The table below summarises some of the main results of this study.

<table>
<thead>
<tr>
<th>Table 3. Share of drivers with a BAC above the legal limit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max. authorised BAC (g/l)</strong></td>
</tr>
<tr>
<td>Car drivers</td>
</tr>
<tr>
<td>Motorcyclists</td>
</tr>
<tr>
<td>Professional drivers</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Note: The sample was taken by traffic agents of 38 municipalities distributed on 16 different provinces, and by 6 provincial police bodies during the period December 2016- June 2018.

Updated statistics showing the link between impaired driving and road crashes are lacking. However, a research undertaken in 2012 by SEDRONAR estimated that out of a sample of 1 777 surveyed cases, 22.5% of road casualties treated in emergency rooms
had consumed some type of psychoactive substance (including alcohol). Such results were based on a declarative survey, and most probably the real extent of the problem is underestimated.

An increasing problem for traffic safety in Argentina is **distraction**. The national traffic law prohibits the use of hand-held mobile phones and electronic devices, DVD players and similar devices while driving. In 2016, an observational nationwide study based on a sample of more than 82,000 cars and 37,000 motorcycles showed that at any time 12.1% of car drivers and 8.2% of motorcycle drivers were distracted. The main distracting factor was the use of mobile phone while driving (7.4%) (ANSV, 2016a). Currently there is no data on the share of crashes due to distracted driving.

The share of **fatigue** as a causal factor in crashes is especially challenging to detect but nevertheless an important issue. National legislation requires professional drivers to rest eight hours after eight hours of driving. Controls are heavily focused on professional drivers of long-distance public transport.

**Seat-belt** wearing has been compulsory in Argentina since 1995 in front and rear seats. While there has been some improvement since 2011, the wearing rate is still very low in comparison to most OECD countries. Based on observational surveys, about 50% of drivers and 43% of front seat passengers wore their seatbelts in 2016 (ANSV, 2016a). On the rear seats, only 23% of adult passengers were buckled, while only 47% of children were seated in a dedicated child restraint system. Declarative surveys conducted in 2016 indicated a much higher use of seatbelts (87% for front seat passengers instead of 43% in the observational surveys) (ANSV, 2016b). However, observational surveys are considered to be a much more reliable source of information.

For motorcyclists, **helmet wearing** is the most effective passive safety habit. All riders of motorised two-wheelers are required to wear helmets in Argentina. In 2016, it was estimated that 65% of motorcycle riders and 44% of passengers wore a helmet (considering only the first passenger) (ANSV, 2016a). These results show stagnation in helmet rate use, for both riders and passengers, since the last survey in 2014. These figures are rather low and suggest that many lives and serious injuries could be prevented if the use of helmets by all riders was nearer 100%.

### Road safety management and strategies

**Responsibility for the organisation of road safety** in Argentina primarily lies with the National Road Safety Agency (ANSV), created in 2008 under the Ministry of the Interior and Transport. The Agency has three councils and committees: a Federal Council, represented by one member of each province; a Scientific Committee, composed of expert members, engineers, doctors, etc.; and a Consultative Committee, represented mainly by relatives of road safety victims.

Argentina updated its road safety strategy in 2016, covering a ten-year period. The strategy set a target of a 30% reduction in the number of people killed or seriously
injured by 2026. The strategy focused on strengthened institutional coordination across the different levels of government; traffic law enforcement, education and road safety campaigns, safer vehicles and infrastructure and post-crash response.

Since its inception, the focus of the ANSV has been on the creation of a national driver’s licence, a national education plan, a national monitoring plan and the development of the National Road Safety Observatory. However, as Argentina is a federal country, provinces are empowered to accept or not recommendations by the national government, as represented by the ANSV.

**Measures**

As a federal country, most of the decisions regarding road safety are taken at provincial and municipal levels. Several measures to **improve road safety management** have recently been put into place, especially to foster co-operation between federal, provincial and municipal levels. These include:

- The promotion of a multi-sector roundtable comprised of organisations from national, provincial and local levels.

- The promotion of Provincial Road Safety Observatories: 16 out of 24 provinces have signed agreements to implement them; fourteen are already in operation (with different levels of development).

- The creation of a Victim Counsel Network, with participation of the 24 provincial jurisdictions. This network will provide legal, social and psychological assistance to crash victims, their families and friends.

- The strengthening of the examination standards throughout the country to obtain a driving license and the securisation of the driving licence card to eliminate the risk of falsification.

- The development of a unique road safety data collection and analysis system (SIGISVI) for the whole federal country.

Likewise, a number of communication actions and training courses targeting **road user behaviours** were initiated in 2017, including:

- The Children Road Safety Programme, which includes short lectures on child protection especially the use of child restraints. This programme is accompanied by a campaign in social networks and an agreement with the National Paediatric Society (SAP). Under this agreement, ANSV designed an online four-week training course targeted at paediatricians with recommendations regarding the use of child restraints and other measures to protect children on the roads.
• The Impaired Driving Road Safety Programme, which is being developed together with an array of institutional stakeholders and considers a set of actions including a national campaign and communicational strategy and the development of protocols and strategies to maximise the dissuasive effect of police enforcement.

• Training courses throughout the country to promote a deep cultural change regarding attitude towards road safety. These courses target: ANSV´s road agents; school teachers in order to introduce road safety at all three school levels; traffic police officers.

• Short courses for Road Police Agents from Entre Ríos, Santa Fe and Corrientes, to standardise procedures. This course will be replicated in other provinces.

• Online courses for cyclists, school teachers and road agents.

• Educational programmes, for different education levels, with the support of the Ministry of Education, public and private institutions and NGOs.

Traffic enforcement is also being reinforced through the introduction of SICAM (National Records and Infractions System with Webcams). This technology has been implemented in 13 capital cities.

Regarding the safety of vehicles, the 5th national agreement was reached with car manufacturers in 2017, regarding the introduction of safety standards in cars. Motorcycle safety is also a key priority in Argentina, where a Second National Agreement was reached with motorcycle manufacturers.

Main federal efforts regarding infrastructure safety concern the Road Safety Audit Guide which will be implemented in 2019.

Definitions, methodology, data collection

Road fatality: Person killed in a traffic crash or within 30 days of the crash.

Serious injury: Non-fatal casualty who stayed more than 24 hours in hospital.

Slight injury: Non-fatal casualty admitted to hospital for less than 24 hours.

The 24 Argentinean jurisdictions send monthly road crash data to the ANSV. Currently there is a transition between the old statistic reporting tools and the new one. This implies that the statistical yearbook is built by analysing data coming from different supports, ranging from an aggregated data sheet to a quite detailed database.

In order to get more detailed road crash statistics, the Argentinean road safety statistical form (Spanish acronym: FEU) was implemented in 2010. This form is mostly used together with the online software called SIGISVI which enables the digitalising and
systematising of the information. In 2017, 16 of the 24 Argentinean provinces used this software to report detailed data on road crashes. Four provinces still send the statistical forms by post to ANSV which then digitalises them.

However, figures obtained from this source of information, when compared with the aggregated source, often demonstrate that there is a large amount of underreporting with this more advanced tool. Therefore, more efforts are needed to improve the coverage of the detailed database.

The ANSV is currently working closely with the 24 jurisdictions in order to improve their crash data collection process. In 2017, the Agency visited most of the provincial agencies in charge of road safety statistics, to provide training and create a network of local road safety observatories.

Although the data collecting process has shown advances in many provinces, evidence-based decision making still remains challenging. There is an important gap that separates policy makers from technical teams that needs to be narrowed.

Since 2010, the ANSV has been working with the Ministry of Health to link hospital records and the FEU Form data. However, very modest progress has been attained so far due to the diverse complexities of the Argentinean health system.

Resources

Recent research

During 2018, the results of five studies conducted by the National Road Safety Observatory were published:

- Understanding the belief system of young people around alcohol consumption and road safety
- The use of safety elements in Mendoza province. Study of a road safety success case.

Results highlighted the need to design an integral approach to tackle the issue of drink driving among young people; to widely spread information regarding the existence and usefulness of child restraint systems (and that their use is enforced by law) and to improve their economic accessibility; or the need to guarantee market availability of
helmets for children and to improve public transport attractiveness in order to provide motorcycle users with a safer alternative. Also the establishment of policy priorities, their coordination among different levels of government, and the involvement of non-governmental organisations (among others) proved to be key elements for Mendoza province to reach the highest safety belt and helmet use rates. The need for more and better police enforcement strategies was a common denominator of these studies.

During 2018, the following studies were started but results are still being processed and will be released during 2019:

- Estimation of the social cost of road crashes, 2017.
- Life experiences of those injured in traffic.
- Survey on Public Hospitals’ Emergency Services.
- Statistical report: BAC testing on drivers.
- Observational study on road users’ behaviour, 2018.
- Road Safety management in Santa Fe province. Study of a road safety success case.
- Traffic law enforcement and road safety. Understanding the role of the different enforcement bodies from their own perspective.

These studies will contribute to the measurement of risk factors such as seat belt and helmet use, or impaired driving together with the incidence of alcohol and drugs on road crash occurrence. The estimate of the cost of road crashes together with the research on life experiences before and after a crash will help to put road safety on the public agenda, while the case study of Santa Fe province will inspire other jurisdictions to follow the track of evidence-based, long term public policies. Finally, the aim of the last study mentioned is to shed some light on the level of legitimisation of traffic law enforcement bodies and to give some policy recommendations about how to empower such bodies.

Websites

National Road Safety Agency (ANSV): https://www.argentina.gob.ar/seguridadvial

National Road Safety Observatory: https://www.argentina.gob.ar/seguridadvial/observatoriovial

References


ANSV (2018b), National road safety diagnoses.
ANSV (2016a), *Observational study on road users’ behaviour.*

ANSV (2016b), *Road safety survey on road user’s perceptions.*