## National Interministerial Road Safety Observatory

4 October 2023

# Description of the annual databases of bodily road traffic accidents Years from 2005 to 2022

For each bodily injury accident (i.e. an accident on a road open to public traffic, involving at least one vehicle and resulting in at least one victim requiring treatment), information describing the accident is entered by **the law enforcement unit** (police, gendarmerie, etc.) **that attended the scene of the accident**. These entries are compiled in a form called a personal injury accident analysis form. All of these forms make up the national file of traffic accidents involving injuries, known as the "BAAC file", which is administered by the ONISR, the national interministerial observatory for road safety.

The databases, extracted from the BAAC file, list all accidents involving injuries on the road in a given year in mainland France, the French overseas departments (Guadeloupe, French Guiana, Martinique, Réunion and Mayotte since 2012) and the other overseas territories (Saint-Pierre-et-Miquelon, Saint-Barthélemy, Saint-Martin, Wallis and Futuna, French Polynesia and New Caledonia; available only from 2019 in open data) with a simplified description. This includes information on the location of the accident, as entered, as well as information on the characteristics of the accident and its location, the vehicles involved and their victims.

Compared with the aggregated databases for 2005-2010 and 2006-2011 currently available on the www.data.gouv.fr website, the databases for 2005 to 2021 are now annual and comprise 4 files (Characteristics - Locations - Vehicles - Users) in csv format.

However, these databases conceal certain specific data relating to users and vehicles and their behaviour insofar as the disclosure of this data would infringe the protection of the privacy of readily identifiable natural persons or would reveal the behaviour of such persons when the disclosure of this behaviour could be prejudicial to them (CADA opinion - 2 January 2012).

Warning: The data on the qualification of hospitalised casualties since 2018 cannot be compared with previous years due to changes in the data entry process used by law enforcement agencies. The "hospitalised injured" indicator is no longer labelled by the official statistics authority as of 2019.

From the 2021 data onwards, hit-and-run users have been added, which means that there is a lack of information about them, in particular their gender, age and even the seriousness of their injuries (uninjured, slightly injured or injured in hospital).

The validity of the statistical analyses that can be made from this database depends on the verification methods used in the field of road safety, and in particular on a precise knowledge of the definitions relating to each variable used. For any analysis, it is important to take note of the structure of the attached BAAC form as well as the user guide for the codification of the bulletin d'analyse des accidents corporels de la circulation.

It should be remembered that a certain number of indicators from this database are subject to labelling by the official statistics authority (Order of 27 November 2019).

## The list is available at:

https://www.onisr.securite-routiere.gouv.fr/outils-statistiques/indicateurs-labellises

## Definitions of the national BAAC data file Traffic Accident Analysis Reports

One road traffic accident involving injuries (fatal and non-fatal) recorded by the police:

- involves at least one victim,
- occurs on a public or private road open to public traffic,
- involves at least one vehicle.

A bodily injury accident involves a number of road users. These include:

- **Uninjured** persons: persons involved in the accident who have not died and whose condition does not require medical attention as a result of the accident,
- victims: involved but not uninjured.
  - o **Fatalities**: people who die as a result of the accident, either immediately or in the thirty days following the accident,
  - o injured persons: victims not killed.
    - In-patient casualties: victims hospitalised for more than 24 hours,
    - **Minor** injuries: victims who have received medical treatment but have not been admitted to hospital as patients for more than 24 hours.

According to the law of 9 August 2004 on public health policy and the decree of 27 March 2007.

Definitions in accordance with the Decision of the Council of the European Union 93/704/EC of 30 November 1993 creating the European accident statistics database (known as "CARE" for Community road accident database) and specifying the obligations of the Member States with regard to the transmission of road accident statistics.

Ministerial instruction INTS171111J of 18 April 2017 issued the technical guide for drafting BAACs. The instruction and the guide can be downloaded at the following address:

https://www.onisr.securite-routiere.gouv.fr/outils-statistiques/methodologies-statistiques

#### Base specifications

The Etalab database of data on traffic accidents involving injuries in a given year is divided into 4 sections, each in the form of a file in csv format.

- 1. The CHARACTERISTICS section, which describes the general circumstances of the accident
- 2. The **PLACE** section, which describes the main location of the accident, even if it took place at a junction.
- 3. The VEHICLES section
- 4. The USERS involved section

Each of the variables contained in a section must be able to be linked to the variables in the other sections. The accident identifier number (Cf. "Num\_Acc") present in these 4 sections makes it possible to establish a link between all the variables describing an accident. When an accident involves several vehicles, it is also necessary to be able to link each vehicle to its occupants. This link is made by the variable vehicle id.

Most of the variables contained in the four files listed above may contain empty cells or a zero or a full stop. In these three cases, the cell has not been filled in by the police or has no purpose.

## An accident can be geolocated in several ways:

- non-standardised partial address (addr field)
- gps coordinates (WGS84 projection)
- · road number, connecting PR and curvilinear distance to this PR

Please note: not all accidents are precisely geolocated using the information available in the BAAC file and reproduced here. At the very least, only the commune in which the accident occurred is provided.

This is a raw database not corrected for input errors, which will be corrected at a later date. Users of this database are invited to inform us by e-mail of any anomalies they may have noted during its use.

## Complete list of fields with details of their content for each file

In 2019, the accident database has changed. In the description below, in green are the new modalities for certain variables and the new variables added.

#### The FEATURES section

#### Num Acc

Accident identification number.

## day month

The day of the accident.

Month of the accident.

#### an

Year of accident.

#### hrmn

Time and minutes of the accident.

#### lum

Light: lighting conditions in which the accident occurred:

- 1 Daylight
- 2 Dusk or dawn
- 3 Night without street lighting
- 4 Night with public lighting off
- 5 Night with street lighting on

#### dep

Department: INSEE (Institut National de la Statistique et des Etudes Economiques) code for the department (2A Corse-du-Sud - 2B Haute-Corse).

#### com

Commune: The commune number is a code given by INSEE. The code is made up of the INSEE code for the département followed by 3 digits.

## agg

Location:

- 1 Outside built-up areas
- 2 In built-up areas

#### int

Intersection:

- 1 Out of intersection
- 2 X intersection
- 3 T-intersection
- 4 Y intersection
- 5 Intersection with more than 4 branches
- 6 Roundabout
- 7 Place
- 8 Level crossing
- 9 Other intersection

#### atm

Atmospheric conditions:

- -1 No information
- 1 Normal
- 2 Light rain
- 3 Heavy rain
- 4 Snow hail
- 5 Fog smoke
- 6 Strong wind storm
- 7 Dazzling weather
- 8 Overcast
- 9 Other

#### collar

Type of collision:

- -1 No information
- 1 Two vehicles frontal
- 2 Two vehicles from the rear
- 3 Two vehicles from the side
- 4 Three vehicles or more in a chain
- 5 Three or more vehicles multiple collisions
- 6 Other collision
- 7 No collision

#### adr

Postal address: variable entered for accidents occurring in built-up areas.

#### lat

Latitude

## Long

Longitude

## The LOCATIONS section

#### Num Acc

Accident identifier identical to that in the "CHARACTERISTICS section" file included in the accident.

## catr

Road category:

- 1 Motorway
- 2 National road
- 3 Departmental road
- 4 Local roads
- 5 Off the public network
- 6 Car park open to public traffic
- 7 Urban roads 9 other

## route

Road number.

#### V1

Numerical index of the route number (example: 2 bis, 3 ter etc.).

#### V2

Alphanumeric road index letter.

#### circ

Traffic regime:

- -1 No information
- 1 A one-way street
- 2 Bidirectional
- 3 With separate carriageways
- 4 With variable assignment channels

#### nbv

Total number of traffic lanes.

#### yourp

Indicates the existence of a reserved lane, regardless of whether or not the accident occurs on this lane.

- -1 No information
- 0 Not applicable
- 1 Cycle path
- 2 Cycle lane
- 3 Reserved lane

#### prof

Longitudinal profile describing the gradient of the road at the site of the accident:

- -1 No information
- 1 Flat
- 2 Slope
- 3 Top of the coast
- 4 Lower coast

#### pr

Number of the connecting PR (number of the upstream terminal). A value of -1 means that the PR has not been entered.

#### pr<sub>1</sub>

Distance in metres to the PR (in relation to the upstream terminal). A value of -1 means that the PR has not been entered.

#### plan

Plan view:

- -1 No information
- 1 Straight section
- 2 Left-hand curve
- 3 Right-hand curve
- 4 S-shaped

## lartpc

Width of the central reservation (TPC) if it exists (in m).

#### **larrout**

Width of carriageway used for vehicular traffic, excluding hard shoulder, TPC and parking spaces (in m).

#### surf

#### Surface condition:

- -1 No information
- 1 Normal
- 2 Wet
- 3 Puddles
- 4 Flooded
- 5 Snow-covered
- 6 Mud
- 7 Icy
- 8 Oils and fats
- 9 Other

#### infra

#### Development - Infrastructure :

- -1 No information
- 0 None of the above
- 1 Underground tunnel
- 2 Bridge autopont
- 3 Interchange or connecting slip road
- 4 Railway line
- 5 Improved crossroads
- 6 Pedestrian zone
- 7 Toll area
- 8 Building site
- 9 Others

#### situ

#### Accident situation:

- -1 No information
- 0 None of the above
- 1 On pavement
- 2 On hard shoulder
- 3 On verges
- 4 On pavement
- 5 On cycle paths
- 6 On other special track
- 8 Other

#### vma

Maximum authorised speed at the place and time of the accident.

#### The VEHICLES section

## Num\_Acc

Accident identifier identical to that in the "CHARACTERISTICS section" file for each of the vehicles described as being involved in the accident.

## vehicle\_id

Unique vehicle identifier for each user occupying the vehicle (including pedestrians, who are attached to the vehicles that hit them) - Numeric code.

## Num\_Veh

Vehicle identifier for each user occupying the vehicle (including pedestrians, who are attached to the vehicles that hit them) - Alphanumeric code.

#### senc

Direction of traffic:

- -1 No information
- 0 Unknown
- 1 PK or PR or increasing postal address number
- 2 PK or PR or descending postal address number
- 3 No benchmark

#### catv

Vehicle category:

- 00 Indeterminable
- 01 Bicycle
- 02 Moped <50cm3
- 03 Voiturette (Quadricycle à moteur carrossé) (formerly "voiturette ou tricycle à moteur") 04 -

Reference unused since 2006 (registered scooter)

05 - Reference unused since 2006 (motorbike) 06 -

Reference unused since 2006 (sidecar)

- 07 LV only
- 08 Reference unused since 2006 (LV + caravan) 09 -

Reference unused since 2006 (LV + trailer)

- 10 LCV only 1.5T <= GVWR <= 3.5T with or without trailer (formerly LCV only 1.5T <= GVWR) <= 3.5T)
- 11 Reference unused since 2006 (VU (10) + caravan)
- 12 Reference unused since 2006 (VU (10) + trailer)
- 13 PL only 3.5T <PTCA <= 7.5T
- 14 HGV only > 7.5T
- 15 HGV > 3.5T + trailer
- 16 Road tractor alone
- 17 Road tractor + semi-trailer
- 18 Reference unused since 2006 (public transport)
- 19 Reference unused since 2006 (tramway)
- 20 Special machinery
- 21 Farm tractor
- 30 Scooter < 50 cm3
- 31 Motorbike > 50  $_{cm3}$  and <= 125  $_{cm3}$
- 32 Scooter > 50 cm<sup>3</sup> and <= 125 cm<sup>3</sup>
- 33 Motorbike > 125 cm3
- 34 Scooter > 125 cm3
- 35 Light quad bike <= 50 cm3 (Motor quad bike without body)
- 36 Heavy quad > 50 cm3 (motorised quadricycle without bodywork)
- 37 Buses
- 38 Coach
- 39 Train
- 40 Tramway
- 41 3WD <= 50 cm3
- 42 3WD > 50 cm3 <= 125 cm3
- 43 3WD > 125 cm3
- 50 Motorised EDP
- 60 EDP without motor
- 80 VAE
- 99 Other vehicle

#### obs

#### Fixed obstacle hit:

- -1 No information
- 0 Not applicable
- 1 Parked vehicle
- 2 Tree
- 3 Metal slide
- 4 Concrete guardrail
- 5 Other slide
- 6 Building, wall, bridge pier
- 7 Vertical signage support or emergency call station
- 8 Posts
- 9 Street furniture
- 10 Parapet
- 11 Island, refuge, high bollard
- 12 Kerbstone
- 13 Ditch, embankment, rock face
- 14 Other fixed obstacle on pavement
- 15 Other fixed obstacle on pavement or shoulder
- 16 Obstacle-free exit
- 17 Nozzle aqueduct head

#### obsm

#### Mobile obstacle hit:

- -1 No information
- 0 None of the above
- 1 Pedestrian
- 2 Vehicle
- 4 Rail vehicle
- 5 Pets
- 6 Wild animal 9 -

Other

## shock

## Initial impact point:

- -1 No information
- 0 None of the above
- 1 Before
- 2 Front right
- 3 Front left
- 4 Rear
- 5 Right rear
- 6 Rear left
- 7 Right side
- 8 Left side
- 9 Multiple impacts (barrels)

#### many

#### Main manoeuvre before the accident :

- -1 No information
- 0 Unknown
- 1 No change of direction
- 2 Same direction, same line
- 3 Between 2 lanes
- 4 In reverse

- 5 Against the grain
- 6 Crossing the central reservation
- 7 In the bus lane, in the same direction
- 8 In the bus lane, in the opposite direction
- 9 By fitting in
- 10 Turning around on the road

#### **Changing lanes**

- 11 To the left
- 12 To the right

#### **Deported**

- 13 To the left
- 14 To the right

#### **Turning**

- 15 To the left
- 16 To the right

#### Exceeding

- 17 To the left
- 18 To the right

#### **Miscellaneous**

- 19 Crossing the carriageway
- 20 Parking manoeuvre
- 21 Avoidance manoeuvre
- 22 Door opening
- 23 By-law (excluding parking)
- 24 Parked (with occupants)
- 25 On the pavement
- 26 Other manoeuvres

#### motor

## Type of vehicle engine:

- -1 No information
- 0 Unknown
- 1 Hydrocarbons
- 2 Hybrid electric
- 3 Electric
- 4 Hydrogen
- 5 Human
- 6 Other

#### occutc

Number of occupants on public transport.

#### The USERS section

### Num Acc

Accident identifier identical to that in the "CHARACTERISTICS section" file for each of the users described as being involved in the accident.

#### user\_id

Unique user identifier (including pedestrians who are attached to the vehicles that hit them) - Numeric code.

## vehicle id

Unique vehicle identifier for each user occupying the vehicle (including pedestrians, who are attached to the vehicles that hit them) - Numeric code.

#### num\_Veh

Vehicle identifier for each user occupying the vehicle (including pedestrians, who are attached to the vehicles that hit them) - Alphanumeric code.

#### place

Used to locate the seat occupied in the vehicle by the user at the time of the accident. Details are shown in the illustration below:

Transport en commun

7 7 1 Voiture 8 8 8 8 8 Moto / Side-car 5 8 8 5 8 8 8 5 8 6 3 9 2

10 - Pedestrian (not applicable)

#### catu

User category:

- 1 Driver
- 2 Passengers
- 3 Pedestrian

#### grav

The severity of the user's injury. Accident victims are classified into three categories, plus those who are uninjured:

- 1 Unharmed
- 2 Killed
- 3 Injured in hospital
- 4 Slightly injured

#### gender

Gender of user:

- 1 Male
- 2 Female

#### An nais

User's year of birth.

#### route

Reason for journey at time of accident :

- -1 No information
- 0 No information
- 1 Home work
- 2 Home school
- 3 Shopping
- 4 Professional use
- 5 Walking leisure 9 -

Other

Until 2018, safety equipment was divided into 2 variables: existence and use.

From 2019 onwards, it will be possible for the same user to use up to 3 items of equipment (in particular for motorcyclists, who must wear helmets and gloves).

#### secu1

Character information indicates the presence and use of safety equipment:

- -1 No information
- 0 No equipment
- 1 Belt
- 2 Helmets
- 3 Children's device
- 4 Reflective waistcoat
- 5 Airbag (2WD/3WD)
- 6 Gloves (2WD/3WD)
- 7 Gloves + Airbag (2WD/3WD)
- 8 Not determinable
- 9 Other

#### secu2

Character information indicates the presence and use of safety equipment:

- -1 No information
- 0 No equipment
- 1 Belt
- 2 Helmets
- 3 Children's device
- 4 Reflective waistcoat
- 5 Airbag (2WD/3WD)
- 6 Gloves (2WD/3WD)
- 7 Gloves + Airbag (2WD/3WD)
- 8 Not determinable
- 9 Other

#### secu3

Character information indicates the presence and use of safety equipment:

- -1 No information
- 0 No equipment
- 1 Belt
- 2 Helmets
- 3 Children's device
- 4 Reflective waistcoat
- 5 Airbag (2WD/3WD)
- 6 Gloves (2WD/3WD)
- 7 Gloves + Airbag (2WD/3WD)
- 8 Not determinable
- 9 Other

## locp

Pedestrian location:

- -1 No information
- 0 Not applicable

#### On pavement:

- 1 At + 50 m from the pedestrian crossing
- 2 A 50 m from pedestrian crossing

#### On pedestrian crossings:

- 3 Without light signalling
- 4 With light signalling

#### Miscellaneous:

- 5 On pavement
- 6 On verges
- 7 On refuge or BAU
- 8 On the driveway
- 9 Unknown

## actp

#### Pedestrian action:

-1 - No information

## Moving around

- 0 Not known or not applicable
- 1 Direction of striking vehicle
- 2 Opposite direction of vehicle

## Miscellaneous

- 3 Crossing
- 4 Masked
- 5 Playing running
- 6 With animal
- 9 Other
- A Getting in and out of the vehicle
- B Unknown

#### etatp

This variable indicates whether or not the pedestrian involved in the accident was alone:

- -1 No information
- 1 Alone
- 2 Accompanied
- 3 In a group