

Relevant Accident Related Factors – Risk and Frequencies of Contributing to Road Traffic Accidents

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Abstract

In the course of the European Project TRACE (Traffic Accident Causation in Europe) an attempt was made to analyse the cause of road traffic accidents from a factors' point of view. By literature review the most important independent risk factors for traffic accidents were identified to be speed, alcohol intake, male gender, young age, cell phone use, and fatigue. However, the impact of an accident related factor also depends on its prevalence in traffic and accidents, respectively. Available to the Partners in the TRACE Project were different accident databases. Causally contributing factors found by accident investigations that are most often coded in accident databases are connected to unadapted speed and inattention. Taking into account the risk increase and the frequency of contribution to accidents the conclusion can be drawn that the most relevant factors for accident causation are: "alcohol", "speed", and "inattention and distraction".

INTRODUCTION

According to Elvik [1], a variety of theories on accident causation exists and up until today no synthesis has emerged. Theories and models are reflecting peoples' views on reality to explain complex relations in simplified ways. The motivation lies in the belief that (every) accident can be prevented, if the causes for this accident can be eliminated. Accident Models shall help to understand the occurrence of traffic accidents and give answers to questions on how and why accidents happen, where and when they take place, and who is involved, and furthermore to find according preventive measures.

Epidemiological studies can reveal risk factors for crashes that increase the chance for an accident to occur or the chance for someone to cause, or just be involved in an accident. Additionally, in-depth accident research identifies factors that contributed to a specific accident and are able to explain the occurrence of the accident. This is done by applying causality to certain factors that led to the accident. Most in-depth accident databases provide a list of factors, from which the investigator can choose the factors that contributed to the accident. Some investigation classifications code key events or triggering factors in addition, to also consider the most important factors, or the last factors, that finally caused the accident in the causal chain in time, respectively.

Of course, usually one factor cannot cause an accident. Most often a combination of contributing factors, forming a sufficient cause, leads to the accident [2,3].

In the course of the European project TRACE, Workpackage3 was concerned with "Types of Factors" to analyse the cause of road traffic accidents from a factors' point of view whereas other work packages were looking at the same event (crash) from a category of road users and types of pre-accident situations angles. Available to the Partners in the TRACE Project were different accident databases. This study is an extraction and a further development on the basis of the work performed for WP3, task 3.1 "Accident related factors" [4].

MATERIAL AND METHODS

In the following a distinction will be made between factors increasing the risk for an accident to occur, called "risk factors" and factors that are thought to be causally contributing to an accident, called "contributing factors". The first factors are derived by statistical methods and the contributing factors

are found by in-depth analysis and collected in databases. A contributing factor can be any event, circumstance, situation, characteristic etc. causally contributing to an accident.

Published studies were screened for their ability to provide adjusted risks for traffic accident occurrence, traffic accident causation and traffic accident involvement of all kinds of factors. Not regarded are risks for special sub-groups (population restriction on certain sites, traffic participants, or mechanisms), cf. [4].

The relevance of a factor depends on its attributed risk increase but also on its prevalence in traffic and accidents, respectively.

Therefore database analysis on the contributing factors' frequency of occurrence in the accident databases available to the Project partners was performed.

These databases covered the at least parts of the following catchment areas: Czech Republic, France (North), France (South), Germany, Germany (north and east), Great Britain, Great Britain (England (Midlands and Southeast)) Greece (South), Italy, Spain, Spain (Catalonia), and Spain (central). The accident samples requested from the Partners should cover all kinds of accidents in their databases (no restrictions in criteria) and should contain all collected accidents of the year 2004, if this was feasible.

To compare absolute frequencies of factors between databases is not feasible as different sampling and coding procedures and variable categories are used (see Annex 2 and [4]). Therefore keywords were developed that cover meaningful concepts for the contributing factors in the different databases. Keywords were: alcohol, attention, careless, drugs, exceeding speed limit, experience, health status, inappropriate speed, road layout, road surface condition, safety distance, traffic offence (priority), vehicle condition, vigilance, visibility and view obstruction, weather condition. Sometimes re-grouping of aggregated data results was performed for providing comparability.

The absolute frequencies of the contributing factors were set in relation to the sum of all applied factors, to get an idea on how frequently this factor is occurring in the data material of the database. For this relative share of the contributing factors the limits of the 95% Confidence interval were compared to the expected share of the factors. Thus "significant" overrepresented and underrepresented factors for each database were defined (see Annex 3). The "overrepresentation" is expressed as the relation of the actual relative share to the expected share. The overrepresented factors either cover a range of different underlying preceding factors or, these factors are frequently contributing to accidents.

Relevance is defined by regarding risk increase and frequency of occurrence by pragmatic combining results from literature review and database analysis.

RESULTS

By literature review the most important independent risk factors for traffic accidents in general (not for a specific sub-populations of traffic participants or types of accidents) were identified to be "speed", "alcohol intake", "male gender", "young age", "cell phone use", and "fatigue", see Annex 1.

From the database evaluations it can be seen that the most important factors contributing to accidents are "speed" and "inattention/distraction", followed by "alcohol" and "safety distance", see also Annex 3. Table 1 lists only the most frequently coded factors in each database where a keyword has been applicable. E.g. in the French (North) data "inappropriate reaction" was the most frequent factor but no keyword was applicable that would be found in other databases as well.

In a very high share the most frequent factors are related to the individual traffic participant. Frequencies indicate that the vehicle in terms of maintenance or mechanical failures only seldom contributes to accidents (see also Annex 3). Also, apart from adverse weather conditions and visibility restrictions, the environmental influences are not often coded by accident investigators.

Table 1: List of the most frequent contributing factor in each database

Database, all accidents (2004, except indicated)	country	Contributory factor reported in accident database	key word	relative overrepresentation and 95% Confidence Interval	% of accidents
GIDAS_in-depth	Germany (north and east)	inappropriate speed	inappropriate speed	12,3 [8,4;22,0]	12,5
Czech_national (2001-2004)	Czech Republic	visibility	visibility and view obstruction	9,4 [9,1;15,1]	37,5
BASt_Germany_national	Germany	unadopted speed in other cases	inappropriate speed	12,2 [12,0;18,4]	28,0
CIDAUT_in-depth	Spain (central)	Other distraction in/on vehicle	attention	12,3 [1,1;1284,3]	35
Stats_GB_national (2005)	Great Britain	Failed to look properly	attention	24,3 [23,5;31,7]	31,5
SISS_Italy_in-depth	Italy	Driving with exceeding speed	exceeding speed limit	18,0 [16,1;25,5]	8,8
INRETS_in-depth	France (South)	Automatic driving: low attention level due to high experience of the trip (or its monotony)	attention	7,1 [2,2;40,7]	46,5
OTS_in-depth	Great Britain (Midlands and Southeast)	Inattention	attention	6,8 [4,7;15,1]	12,6
LAB_in-depth (1990-2004)	France (North)	Excessive speed	exceeding speed limit	5,8 [3,9;14,0]	33,8
IDIADA_Catalonia_national	Spain (Catalonia)	Inappropriate speed for conditions on the road	inappropriate speed	4,6 [4,3;9,3]	7,1
CIDAUT_Spain_national	Spain	Distraction	attention	4,6 [4,5;8,9]	37,7
HIT_in-depth	Greece (South)	Excessive speed	exceeding speed limit	5,2 [0,6;1584,0]	41

DISCUSSION

Some factors for accident causation are only found as contributing factors represented in accident databases as contributing factors but not as risk factors. This might be because the factor bears a risk for an accident of nearly reaching 100% or already indicating the occurrence of an accident (like tyre blow out or animals) meaning that if the factor was present then an accident occurred. The other way round some factors are only found as risk factors but are never regarded as causal contributing factor like e.g. gender. Male gender bears a higher risk for accidents, but is not regarded as a causal contributing factor for an accident. Here the risk factor has to be seen as an indicator for certain contributing factors like e.g. speeding, drunk driving and risk taking behaviour.

Comparing the results from different databases is not a trivial task due to different levels of detail and the implications and coding instructions for different factors as well as on the sample criteria the databases cover. Therefore attempts of harmonizing databases across Europe (like e.g. EU-Project SafetyNet, ERSO) should be encouraged. By applying keywords and setting the share of coded factors in relation to the expected share of factors if they were distributed at random gives an idea of the relevance of contributing factors across the selected countries in Europe. Still, speeding and inattention have to be regarded as the most relevant factors. Also at high ranks in the databases are alcohol and safety distance. The factors with a high risk potential like cell phone use [5] might bear an elevated risk for an accident, but the frequency of those factors of contributing to accidents lies either in the lower ranges, or are not covered by the coding structures of the databases.

Taking into account the findings for risk increase (from literature) and frequency of contribution to accidents (from database analysis) the conclusion can be drawn that the most relevant factors for accident causation are: alcohol, speed, and inattention (and distraction).

Those results presented give indications where to set focus on preventive measures not from an environmental or vehicle point of view, except active safety systems like e.g. mandatory intelligent speed adaptation systems, but transfers the responsibility to the individual traffic participant. In detail it implies suggestions covering: more controls and restrictions in alcohol and speed, law enforcement, and alteration of individual behaviour, which could be achieved by education and licensing modalities. Still, the human and society, respectively, is the one developing the roadway system, building vehicles, and participating in traffic. The Human is the one who can avoid accidents. In actual accidents a helping hand from the vehicle and the environment could have avoided the Human from failing in his driving tasks [6]. Therefore in-depth accident research and database coding systems need constant improvement. Traffic accident causation analysis by in-depth investigations has to be improved in the future to find countermeasures from an environmental, traffic system related, infrastructural or vehicle point of view and not by focussing only on the individual. In TRACE e.g. Work Package 5 [6] provides a systematic for analysing accidents more comprehensively.

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The Trace Partners have access to national and in-depth databases. The results presented in this report are based on the work performed by the according organisations keeping the databases.

No guarantee can be given on the correctness of the interpretations of the results. The conclusions drawn might not reflect the views of the organisations and partners, respectively.

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STATS 19: National Accident Data for Great Britain are collected by police forces and collated by the UK Department for Transport. The data are made available to the Vehicle Safety Research Centre, Ergonomics and Safety Research Institute, at Loughborough University by the UK Department for Transport. The Department for Transport and those who carried out the original collection of the data bear no responsibility for the further analysis or interpretation of it.

In the early 1990s, the LAB (Laboratoire d'Accidentologie de Biomécanique et de comportement humain PSA Peugeot Citroën – Renault) pooled resources with the state-funded INRETS (Institut National de REcherche sur les Transports et leur Sécurité) in a common active safety research program – VSR (Véhicule et Sécurité Routière). 4 teams of investigators were called out to injury accident scenes by the emergency services to collect real-time crash data (approximately 60 accidents per team per annum). In 1999, at the end of this joint program, the two partners chose different but complementary directions. The LAB began to evaluate the effectiveness of new safety systems, whereas the INRETS continued developing its driver failure model. The LAB has since adopted this model and included it in the ongoing in depth accident investigation program.

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Annex 1

Result from literature review on risk factors for traffic accidents (risk for individual crash involvement, causation, or for general crash occurrence)

possible risk Factor	result from risk studies found by literature review
Speed	enough evidence for increased risk at higher speeds
Alcohol	enough evidence for increased risk for crashes
indicators for fatigue	enough evidence for increased risk for crashes
gender/male	enough evidence for increased risk for crashes (esp at fault)
Cell phone use	enough evidence for increased risk (hand hold and hands-free)
Age	higher risk for young drivers, contradicting results for old drivers
Variance of speed	tendency for increased risk
Anxiety	tendency for increased risk
depression	tendency for increased risk
stress	tendency for increased risk
rain	tendency for increased risk
urban area (vs rural)	tendency for increased risk
Poor road user eyesight	tendency for increased risk
foreign driver	tendency for increased risk
poverty	tendency for increased risk
Benzodiazepines	tendency for increased risk, especially for long-acting B. and during first weeks of use
low education level	tendency for increased risk
Poly-drug use	low evidence, hints for increased risk
curves	low evidence, hints for increased risk
carrying passengers	low evidence, hints for increased risk
vehicle technical defects	low evidence due to sparse studies, hints for lack of maintenance (defective brakes) as risk for large commercial trucks
road condition	low evidence due to sparse studies, tendency for increased risk on wet and slippery condition
vehicle colour	low evidence due to study quality, hints for preventive effect of light colours
Other drugs	low evidence due to sparse studies, mixed effects
number of lanes	low evidence due to sparse studies, mixed effects
Medicinal drugs	not enough evidence except Benzodiazepines
traffic volume	contradicting results, hints for increased risk
night/day	contradicting results
Cannabis	contradicting results, no prove for increased (or decreased) risk

Annex 2

Information on database coding concerning "contributing factors"

Germany national data provide a list of 83 factors and at maximum 3 factors can be applied.

Great Britain national data provide a list of 77 factors and at maximum 6 factors can be applied.

Spain national data provide a list of 13 factors and an unlimited number of factors can be applied.

Czech national data provide a list of 42 factors and 6 factors can be applied.

Catalonia national data provide a list of 47 factors and multiple factors can be applied.

Great Britain in-depth data provide a list of 54 factors and multiple factors can be applied.

Spain in-depth data provide a list of 54 factors and multiple factors can be applied.

Greece in-depth data provide a list of 20 factors and multiple factors can be applied.

France (South) in-depth data provide a list of 61 factors and multiple factors can be applied.

France (North) in-depth data provide a list of 66 factors and multiple factors can be applied.

Germany in-depth data provide a list of 79 factors and 1 factor is applied.

Italy in-depth data provide at maximum 41 factors and at maximum 3 factors can be applied.

In addition Czech national and France (North) and Great Britain in-depth provide a second dimension of coding precipitating factors and causes respectively.

Annex 3

Contributing factors with significant (95% Confidence interval limits of relative share higher or lower than expected share) over- and under-representation in databases

List of Factors with over-representation in corresponding database

Rank in corresponding database	Causation factors /Contributing factors	relative share (in %)	95% CI lower limit	95% CI upper limit	expected share (in %)	Relative Over-representation
1	Failed to look properly	31,5	31,3	31,8	1,3	24,3
1	Driving with exceeding speed	24,3	23,6	25,0	1,4	18,0
1	observing right of way	19,7	17,8	21,8	1,3	15,6
2	Careless driving	20,6	20,0	21,3	1,4	15,3
2	Failed to judge other persons path/speed	17,8	17,6	18,0	1,3	13,7
3	Careless, reckless, in a hurry	16,1	15,9	16,3	1,3	12,4
1	1.5. Distraction Other (specify).	22,9	11,1	40,1	1,9	12,3
2	3.8. Not obeying STOP sign.	22,9	11,1	40,1	1,9	12,3
1	crossing intersection	26,3	25,8	26,8	2,1	12,3
2	inappropriate speed	15,5	13,8	17,4	1,3	12,3
1	13 inappropriate speed in other cases	14,7	14,6	-	1,2	12,2
2	49 Other mistakes made by driver	14,2	-	-	1,2	11,8
4	Poor turn/manoeuvre	14,9	14,8	15,1	1,3	11,5
5	Loss of control	14,4	14,2	14,6	1,3	11,1
6	Going too fast for conditions	11,6	11,4	11,8	1,3	8,9
3	14 Insufficient safety distance (Other causes leading to a traffic accident should be allocated to the respective positions, such as speed, overfatigue, etc.)	10,0	-	-	1,2	8,3
3	Driving without keeping safety distance	10,5	10,1	11,1	1,4	7,8
4	28 Failure to observe the traffic signs regulating the priority	9,4	-	-	1,2	7,8
3	3.1. Speeding.	14,3	5,1	30,3	1,9	7,7
1	wet	18,2	18,0	18,4	2,4	7,6
7	Slippery road	9,7	9,5	9,8	1,3	7,4
8	Pedestrian failed to look properly	9,3	9,1	9,4	1,3	7,1
1	Automatic driving: low attention level due to high experience of the trip (or its monotony)	11,6	7,3	17,3	1,6	7,1
1	Inappropriate reaction (panic, exaggerated movements...)	10,3	8,9	11,9	1,5	6,8
1	Inattention	12,6	10,9	14,4	1,9	6,8
2	Carelessness, reckless or thoughtless	12,2	10,6	14,0	1,9	6,6
3	other mistakes by the driver	8,1	6,8	9,6	1,3	6,4
4	5.1. Tiredness.	11,4	3,4	26,7	1,9	6,2
2	under influence of alcohol	14,4	-	-	2,4	6,1
2	Excessive speed	8,7	7,4	10,2	1,5	5,8
4	safety distance	7,2	6,0	8,6	1,3	5,7
9	Following too close	7,4	7,2	7,5	1,3	5,7
5	35 Mistakes made when turning	6,8	6,7	6,8	1,2	5,6
3	Alcohol impairment	8,2	6,9	9,6	1,5	5,4
10	Sudden braking	7,0	6,8	7,1	1,3	5,4
4	Wet road surface	8,0	6,8	9,5	1,5	5,3
2	Rigid attachment to the right of way status	8,7	5,0	13,9	1,6	5,3
3	Atypical manoeuvres from other users	8,7	5,0	13,9	1,6	5,3
1	Excessive speed	25,9	12,1	46,3	5,0	5,2
3	Lack of judgement of own path	9,3	7,9	11,0	1,9	5,0
2	Inappropriate speed for conditions on the road	9,8	9,5	10,2	2,1	4,6
1	Distraction.	35,2	-	-	7,7	4,6
4	Excessive speed	8,2	6,8	9,8	1,9	4,4
2	Disobeying a circulation order.	32,7	32,5	33,0	7,7	4,3
5	turn	5,3	4,2	6,5	1,3	4,2
11	Impaired by alcohol	5,4	5,2	5,5	1,3	4,1
5	Looked but did not see	7,4	6,1	8,8	1,9	4,0
12	Learner/Inexperienced driver	5,1	5,0	5,2	1,3	3,9
6	In a hurry	7,2	5,9	8,6	1,9	3,9
13	Exceeding speed limit	5,0	4,8	5,1	1,3	3,8
4	Driving without respecting the "STOP" sign	5,0	4,7	5,4	1,4	3,7
7	Failure to judge others persons path or speed	6,8	5,6	8,2	1,9	3,7
6	01 Influence of alcohol	4,4	4,3	4,4	1,2	3,6
3	at night, with public lighting - undeteriorated due to weather conditions	8,5	8,4	8,7	2,4	3,6
5	Driving without respecting the "GIVE WAY" sign	4,8	4,4	5,1	1,4	3,5
4	Temporal inconvenience for visibility (sun, other vehicle)	5,8	2,8	10,4	1,6	3,5
3	turning right	7,5	7,2	7,8	2,1	3,5
6	ignoring the traffic	4,2	3,3	5,3	1,3	3,3
4	at night, without public lighting - undeteriorated due to weather conditions	7,8	7,6	7,9	2,4	3,3
14	Careless, reckless or in a hurry	4,2	4,1	4,3	1,3	3,2
15	Aggressive driving	4,1	4,0	4,3	1,3	3,2
16	Disobeyed Give Way or Stop sign	3,9	3,8	4,0	1,3	3,0
4	other	6,3	6,1	6,6	2,1	3,0
5	stopped	6,3	6,1	6,6	2,1	3,0
17	Swerved	3,8	3,7	3,9	1,3	2,9
7	11 Violation of the rule of driving on the right side	3,4	3,4	3,5	1,2	2,9
5	Visibility limited by infrastructure (road equipment, vegetation and buildings)	4,6	2,0	8,9	1,6	2,8
8	Failed to look	5,1	4,0	6,3	1,9	2,7
8	37 Mistakes made when entering the flow of traffic (e.g. from premises, from another part of the road or when starting off the edge of the road) Improper behaviour towards pedestrians	3,2	3,1	3,2	1,2	2,6
5	Poor experience	3,9	3,0	5,0	1,5	2,6
6	Surroundings obscured by infrastructure or roadside element or road geometry	3,9	3,0	4,9	1,5	2,6

6	Automatic driving: low attention level due to high experience of the manoeuvre	4,0	1,7	8,2	1,6	2,5
7	Choose of a too high vehicle speed for the situation	4,0	1,7	8,2	1,6	2,5
9	89 Other causes (list and briefly describe)	3,0	2,9	3,0	1,2	2,5
6	Alcohol	3,3	3,0	3,6	1,4	2,5
5	influenced by action of other road traffic participant	5,8	5,7	5,9	2,4	2,4
6	by day - deteriorated due to weather conditions (fog, snowfall, rainfall etc.)	5,6	5,5	5,8	2,4	2,4
18	Vision affected by parked vehicle	3,1	3,0	3,2	1,3	2,4
6	turning left	5,0	4,7	5,2	2,1	2,3
19	Other	3,0	2,9	3,1	1,3	2,3
20	Road layout	2,8	2,8	2,9	1,3	2,2
7	Crossing an intersection	4,7	4,4	4,9	2,1	2,2
21	Failed to judge vehicles path/speed	2,8	2,7	2,9	1,3	2,2
7	LZA, police officers	2,7	1,9	3,6	1,3	2,1
22	Pedestrian masked when crossing	2,7	2,6	2,8	1,3	2,1
7	Roadside shoulders not driveable (step, bank, trees...)	3,1	2,3	4,1	1,5	2,0
7	rainfall	4,8	4,7	4,9	2,4	2,0
7	Driving without giving the priority to the vehicle coming from the right	2,7	2,5	3,0	1,4	2,0
8	Careless	2,7	2,4	3,0	1,4	2,0
10	10 Use of wrong carriageway (or lane) or unlawful use of other parts of the road	2,4	2,3	2,4	1,2	2,0
8	rush hours	4,0	3,8	4,3	2,1	1,9
9	crossing the road outside the intersection	3,9	3,7	4,2	2,1	1,9
8	pedestrian at other places	2,3	1,6	3,2	1,3	1,8
23	Junction overshoot	2,4	2,3	2,4	1,3	1,8
3	Inadequate velocity.	13,9	13,7	14,1	7,7	1,8
11	73 Rain	2,1	2,1	2,1	1,2	1,8
9	turning, reversing	2,2	1,5	3,1	1,3	1,7
9	Following too close	3,2	2,4	4,3	1,9	1,7
10	Aggressive driving	3,2	2,4	4,3	1,9	1,7
12	72 Snow, ice	2,1	2,0	2,1	1,2	1,7
8	Poor road surface	2,5	1,8	3,4	1,5	1,7
10	wrong lane	2,1	1,4	2,9	1,3	1,6
13	36 Mistakes made when making U-turn or 33, 40) reversing	2,0	1,9	2,0	1,2	1,6
9	Entering in the traffic flow	2,2	2,0	2,5	1,4	1,6
24	Dazzling sun	2,1	2,0	2,1	1,3	1,6
9	Inappropriate speed (related to weather, road surface, infrastructure...)	2,4	1,7	3,3	1,5	1,6
10	Mood (stress, preoccupation, anger...)	2,3	1,7	3,2	1,5	1,5
11	alcohol	1,9	1,3	2,8	1,3	1,5
12	other causes	1,9	1,3	2,8	1,3	1,5
8	rainfall beginning, slight rainfall	3,6	3,5	3,7	2,4	1,5
25	Distraction in vehicle	2,0	1,9	2,0	1,3	1,5
26	Junction restart	1,9	1,8	2,0	1,3	1,5
10	incorporation to traffic	3,1	2,9	3,3	2,1	1,5
14	42 at other places	1,8	1,7	1,8	1,2	1,5
27	Vision affected by road layout	1,8	1,7	1,8	1,3	1,4
28	Failed/Misleading signal	1,8	1,7	1,8	1,3	1,4
29	Impaired by alcohol	1,7	1,7	1,8	1,3	1,3
30	Disobeyed traffic signal	1,7	1,7	1,8	1,3	1,3
31	Rain, sleet, snow or fog	1,7	1,7	1,8	1,3	1,3
11	Impairment through alcohol	2,5	1,7	3,4	1,9	1,3
10	Converting the direction or reversing	1,8	1,6	2,0	1,4	1,3
11	overtaking on the right	2,8	2,6	3,0	2,1	1,3
15	64 without paying attention to the traffic	1,5	1,5	1,6	1,2	1,3
11	Incorrectly turning on the left	1,7	1,5	2,0	1,4	1,3
16	31 Failure to observe the traffic control by policemen or traffic lights (except pos. 39)	1,5	1,5	1,6	1,2	1,3
9	glaze, hardened snow - unsprinkled	3,0	2,9	3,1	2,4	1,3
32	Nervous, uncertain or panic	1,6	1,6	1,7	1,3	1,3
17	12 and exceeding at the same time the speed limit	1,5	1,5	1,5	1,2	1,2
10	by day - deteriorated (dawn, dusk)	2,7	2,6	2,8	2,4	1,1
33	Distraction outside vehicle	1,5	1,4	1,5	1,3	1,1
34	Deposit on road	1,5	1,4	1,5	1,3	1,1
18	27 Failure to observe the rule "right has priority over left"	1,3	1,3	1,4	1,2	1,1

List of Factors with under-representation in corresponding database

Rank in corresponding database	Causation factors /Contributing factors	relative share (in %)	95% CI lower limit	95% CI upper limit	expected share (in %)	Relative Under-representation
64	lighting regulations	0,0	0,0	0,2	1,3	0,0
65	defects lighting	0,0	0,0	0,2	1,3	0,0
66	defects steering	0,0	0,0	0,2	1,3	0,0
67	defects towing device	0,0	0,0	0,2	1,3	0,0
68	on crossings	0,0	0,0	0,2	1,3	0,0
69	playing in the road	0,0	0,0	0,2	1,3	0,0
70	leaves, clay	0,0	0,0	0,2	1,3	0,0
71	state of road	0,0	0,0	0,2	1,3	0,0
72	road signs	0,0	0,0	0,2	1,3	0,0
73	street lighting	0,0	0,0	0,2	1,3	0,0
74	guarding of level crossings	0,0	0,0	0,2	1,3	0,0
75	fog	0,0	0,0	0,2	1,3	0,0
76	side wind	0,0	0,0	0,2	1,3	0,0
77	storm, thunder-storm	0,0	0,0	0,2	1,3	0,0
78	unguarded road works	0,0	0,0	0,2	1,3	0,0
79	(domestic) animal on road	0,0	0,0	0,2	1,3	0,0
49	Person hit wore dark or inconspicuous clothing	0,0	0,0	0,3	1,9	0,0
50	Defective lights or signals	0,0	0,0	0,3	1,9	0,0
51	Road works at site	0,0	0,0	0,3	1,9	0,0
52	High winds at site	0,0	0,0	0,3	1,9	0,0
53	Glare from head lights	0,0	0,0	0,3	1,9	0,0
54	Failure to see pedestrian in blind spot	0,0	0,0	0,3	1,9	0,0

83	58 Overfatigue	0,0	0,0	0,0	1,2	0,0
47	not respecting police indications	0,0	0,0	0,0	2,1	0,0
82	79 Insufficiently secured railway crossings	0,0	0,0	0,0	1,2	0,0
67	Absent/poor blinker or stop light	0,0	0,0	0,0	1,4	0,0
68	Absent/poor vehicle arrangement for disabled people	0,0	0,0	0,0	1,4	0,0
69	Driving with dazzling light against other vehicle	0,0	0,0	0,0	1,4	0,0
70	Falling down from vehicle for sudden opening door	0,0	0,0	0,0	1,4	0,0
71	Getting on a moving vehicle	0,0	0,0	0,0	1,4	0,0
72	Misuse of towing linking system	0,0	0,0	0,0	1,4	0,0
73	Stopped vehicle without the right sign	0,0	0,0	0,0	1,4	0,0
74	Walking in the wrong direction	0,0	0,0	0,0	1,4	0,0
42	attempt of suicide, suicide	0,0	0,0	0,0	2,4	0,0
46	getting into or out of the vehicle	0,0	0,0	0,0	2,1	0,0
45	rear lights defect	0,0	0,0	0,0	2,1	0,0
44	front lights defect	0,0	0,0	0,0	2,1	0,0
77	Defective mirrors	0,0	0,0	0,0	1,3	0,0
66	Vehicle	0,0	0,0	0,1	1,4	0,0
81	78 Insufficient road lighting	0,0	0,0	0,0	1,2	0,0
42	walking through an emergency zone	0,0	0,0	0,0	2,1	0,0
43	repairing a vehicle	0,0	0,0	0,0	2,1	0,0
80	54 Towing equipment	0,0	0,0	0,0	1,2	0,0
41	lost wheel	0,0	0,0	0,1	2,1	0,0
79	57 Influence of other intoxicating substances (e.g. drugs, narcotics)	0,0	0,0	0,0	1,2	0,0
78	61 on pedestrian crossings without control by policemen or traffic lights	0,0	0,0	0,0	1,2	0,0
77	77 Irregular condition of traffic signs or installations	0,0	0,0	0,0	1,2	0,0
62	Crashing pedestrian with the load	0,0	0,0	0,1	1,4	0,0
63	Going out from driveway without careless	0,0	0,0	0,1	1,4	0,0
64	Incorrectly crossing on footpath regulated by traffic lights or by policeman	0,0	0,0	0,1	1,4	0,0
65	Overtaking a stooped vehicle for the pedestrian priority on the pedestrian crossing	0,0	0,0	0,1	1,4	0,0
13	State of the signals.	0,1	0,1	0,2	7,7	0,0
59	Coming out from the carriageway	0,0	0,0	0,1	1,4	0,0
60	Holes	0,0	0,0	0,1	1,4	0,0
61	Wheeler detaching	0,0	0,0	0,1	1,4	0,0
75	59 Other physical or mental faults	0,0	0,0	0,0	1,2	0,0
76	85 Road construction site on carriageway not or not sufficiently secured	0,0	0,0	0,0	1,2	0,0
40	brakes defect	0,0	0,0	0,1	2,1	0,0
39	standing on the emergency zone on the right	0,1	0,0	0,1	2,1	0,0
41	spilt oil, petroleum	0,1	0,0	0,1	2,4	0,0
12	Working	0,2	0,2	0,2	7,7	0,0
57	Falling down for going down by moving vehicle	0,0	0,0	0,1	1,4	0,0
58	Working on the the roadway with the right sign	0,0	0,0	0,1	1,4	0,0
38	overload	0,1	0,0	0,1	2,1	0,0
74	53 Steering mechanism	0,0	0,0	0,0	1,2	0,0
37	standing on the emergency zone on the left	0,1	0,0	0,1	2,1	0,0
55	Falling down from vehicle for incorrectly position	0,0	0,0	0,1	1,4	0,0
56	Not using glasses or prothesis	0,0	0,0	0,1	1,4	0,0
40	driver's death during driving	0,1	0,1	0,1	2,4	0,0
39	muddy	0,1	0,1	0,1	2,4	0,0
36	steering defect	0,1	0,0	0,1	2,1	0,0
72	67 Failure to use proper side of the road	0,0	0,0	0,0	1,2	0,0
73	84 Storm or other weather influences	0,0	0,0	0,0	1,2	0,0
11	Bad state of the vehicle.	0,3	0,2	0,3	7,7	0,0
71	68 Playing on or near carriageway	0,0	0,0	0,0	1,2	0,0
46	Inadequate signing at site	0,1	0,0	0,4	1,9	0,0
47	Steep hill at site	0,1	0,0	0,4	1,9	0,0
48	Narrow road at site	0,1	0,0	0,4	1,9	0,0
34	working on the road	0,1	0,1	0,1	2,1	0,0
35	slow driving causing problems to others	0,1	0,1	0,1	2,1	0,0
38	under influence of medicine, narcotics	0,1	0,1	0,1	2,4	0,0
33	entering or leaving a vehicle	0,1	0,1	0,1	2,1	0,0
70	75 Grooves in connection with rain, snow or ice	0,0	0,0	0,1	1,2	0,0
69	33 Failure to observe the priority of rail vehicles at railway crossings	0,0	0,0	0,1	1,2	0,0
54	Steering misuse	0,1	0,0	0,1	1,4	0,0
63	Driving on wrong side of road (foreign driver...)	0,1	0,0	0,4	1,5	0,0
64	No reaction (sufficient time and space)	0,1	0,0	0,4	1,5	0,0
65	Passenger action	0,1	0,0	0,4	1,5	0,0
66	Heat	0,1	0,0	0,4	1,5	0,0
37	illness, injury etc.	0,1	0,1	0,1	2,4	0,0
68	25 Failure to observe the rear traffic when driving past stationary vehicles, barriers or obstacles and/or without timely and clearly indicating the intention to swerve out	0,1	0,0	0,1	1,2	0,0
67	71 Other impurities caused by road users	0,1	0,0	0,1	1,2	0,0
53	Careless for morbid action	0,1	0,0	0,1	1,4	0,0
66	83 Side wind	0,1	0,1	0,1	1,2	0,0
56	braking for no reason	0,1	0,0	0,4	1,3	0,1
57	overtaking on the right	0,1	0,0	0,4	1,3	0,1
58	securing stopping vehicles	0,1	0,0	0,4	1,3	0,1
59	overloading	0,1	0,0	0,4	1,3	0,1
60	unsecured cargo	0,1	0,0	0,4	1,3	0,1
61	failure to use the pavement	0,1	0,0	0,4	1,3	0,1
62	wrong side of the road	0,1	0,0	0,4	1,3	0,1
63	rutted	0,1	0,0	0,4	1,3	0,1
52	Absent/poor light	0,1	0,0	0,1	1,4	0,1
36	disabled	0,1	0,1	0,1	2,4	0,1
65	44 Insufficient safety measures in the case of vehicles stopping or broken down and accident sites or with regard to school busses with children getting on or off the bus	0,1	0,1	0,1	1,2	0,1
50	Sudden braking with injured occupants	0,1	0,0	0,1	1,4	0,1
51	Tiredness for exceeding driving time	0,1	0,0	0,1	1,4	0,1
35	bad due to temporary vegetation (grass, grain etc.)	0,1	0,1	0,2	2,4	0,1
64	66 Failure to use footway	0,1	0,1	0,1	1,2	0,1

63	47 Overload, maximum number of passengers exceeded	0,1	0,1	0,1	1,2	0,1
32	puncture	0,1	0,1	0,2	2,1	0,1
47	Stopping, delaying, or playing on the carriageway	0,1	0,0	0,1	1,4	0,1
48	Suddenly coming out from a stopped vehicle	0,1	0,0	0,1	1,4	0,1
49	Walking on the roadway midline	0,1	0,0	0,1	1,4	0,1
62	43 Unlawful stopping or parking	0,1	0,1	0,1	1,2	0,1
46	Overtaking a vehicle that was in an overtaking action	0,1	0,0	0,2	1,4	0,1
10	Vehicle failure.	0,6	0,5	0,6	7,7	0,1
43	Disability	0,1	0,0	0,5	1,9	0,1
44	Poor or no street lighting at site	0,1	0,0	0,5	1,9	0,1
45	Surroundings obscured by bend or winding road	0,1	0,0	0,5	1,9	0,1
31	avoiding obstacle on the right manoeuvre	0,2	0,1	0,2	2,1	0,1
34	gusty wind (side wind, storm etc.)	0,2	0,2	0,2	2,4	0,1
61	80 Fog	0,1	0,1	0,1	1,2	0,1
45	Incorrectly placing side by side with other two wheele vehicles	0,1	0,1	0,2	1,4	0,1
62	First rain after dry period	0,1	0,0	0,5	1,5	0,1
9	Weather.	0,7	0,6	0,7	7,7	0,1
44	Absent/poor bycycle reflector	0,1	0,1	0,2	1,4	0,1
33	sudden change of surface state (icing on the bridge, local glaze etc.)	0,2	0,2	0,2	2,4	0,1
76	Dirty windscreen/visor	0,1	0,1	0,1	1,3	0,1
75	Driving too slow	0,1	0,1	0,1	1,3	0,1
32	dazzled by other vehicle	0,2	0,2	0,3	2,4	0,1
60	46 Failure to observe lighting regulations (except pos. 50)	0,1	0,1	0,1	1,2	0,1
43	Explosion or exceeding usury of tyres	0,1	0,1	0,2	1,4	0,1
59	19 Overtaking in spite of insufficient visibility	0,1	0,1	0,1	1,2	0,1
58	88 Other obstacle on the carriageway (except pos. 43, 44)	0,1	0,1	0,1	1,2	0,1
53	other defects	0,1	0,0	0,5	1,3	0,1
54	other behavioural mistakes	0,1	0,0	0,5	1,3	0,1
55	rain, hail, snow	0,1	0,0	0,5	1,3	0,1
31	sudden physical indisposition	0,3	0,2	0,3	2,4	0,1
57	70 Impurity through oil leakage	0,1	0,1	0,1	1,2	0,1
74	Impaired by drugs	0,1	0,1	0,2	1,3	0,1
42	Walking or stopping on the pavements, bank	0,1	0,1	0,2	1,4	0,1
56	16 Unlawful right-hand overtaking	0,1	0,1	0,1	1,2	0,1
30	other bad view conditions	0,3	0,2	0,3	2,4	0,1
55	81 Heavy rain, hail, flurry of snow and the like	0,1	0,1	0,1	1,2	0,1
38	Other personal-factor (give details) (48)	0,2	0,0	0,6	1,9	0,1
39	Tyre worn or insufficient tread	0,2	0,0	0,6	1,9	0,1
40	Earlier accident	0,2	0,0	0,6	1,9	0,1
41	Obscuration due to weather	0,2	0,0	0,6	1,9	0,1
42	Animal out of control	0,2	0,0	0,6	1,9	0,1
54	74 Other influences (among others, leaves, loam washed up)	0,1	0,1	0,1	1,2	0,1
53	52 Brakes	0,1	0,1	0,2	1,2	0,1
73	Defective eyesight	0,2	0,1	0,2	1,3	0,1
41	Overtaking without respecting the "NO PASSING" sign	0,2	0,1	0,2	1,4	0,1
29	other road surface state (during the accident)	0,3	0,3	0,3	2,4	0,1
56	Poor evaluation / anticipation (other vehicle's speed...)	0,2	0,0	0,6	1,5	0,1
57	Vehicle load influencing driving style	0,2	0,0	0,6	1,5	0,1
58	Windscreen and window defects (misted, deteriorated...)	0,2	0,0	0,6	1,5	0,1
59	Speed differential	0,2	0,0	0,6	1,5	0,1
60	Road markings	0,2	0,0	0,6	1,5	0,1
61	Snow	0,2	0,0	0,6	1,5	0,1
72	Traffic calming	0,2	0,1	0,2	1,3	0,1
52	30 Failure to observe the priority by vehicles coming from dirt roads	0,2	0,1	0,2	1,2	0,1
51	41 at stops (also at school busses stopping with the warning flasher device flashing)	0,2	0,2	0,2	1,2	0,1
30	walking through the road on the right	0,3	0,2	0,4	2,1	0,1
50	23 Mistakes made when being overtaken	0,2	0,2	0,2	1,2	0,1
49	76 Other road condition	0,2	0,2	0,2	1,2	0,1
40	Sleepy	0,2	0,1	0,3	1,4	0,1
48	48 Insufficient safety measures with regard to load or vehicle accessories	0,2	0,2	0,2	1,2	0,1
71	Defective traffic signals	0,2	0,2	0,2	1,3	0,1
70	Defective lights/indicators	0,2	0,2	0,2	1,3	0,1
38	Drugs	0,2	0,1	0,3	1,4	0,1
39	Overtaking on a bend, on a hump or in a poor visibility circumstance	0,2	0,1	0,3	1,4	0,1
47	29 Failure to observe the priority of the passing traffic on motorways or motor vehicle roads (§ 18, para. 3)	0,2	0,2	0,2	1,2	0,2
35	Cross from behind parked car	0,3	0,1	0,7	1,9	0,2
36	Defective brakes	0,3	0,1	0,7	1,9	0,2
37	Surroundings obscured by moving vehicle	0,3	0,1	0,7	1,9	0,2
46	50 Lighting	0,2	0,2	0,2	1,2	0,2
45	country paths (fields, woods)	0,2	0,0	0,6	1,3	0,2
46	at pedestrian underpasses	0,2	0,0	0,6	1,3	0,2
47	defects tyres	0,2	0,0	0,6	1,3	0,2
48	defects brakes	0,2	0,0	0,6	1,3	0,2
49	near crossings	0,2	0,0	0,6	1,3	0,2
50	oil	0,2	0,0	0,6	1,3	0,2
51	fouling (dirt)	0,2	0,0	0,6	1,3	0,2
52	Wildlife on road	0,2	0,0	0,6	1,3	0,2
69	Spray	0,2	0,2	0,2	1,3	0,2
37	Braking misuse	0,2	0,1	0,3	1,4	0,2
68	Driver using mobile phone	0,2	0,2	0,2	1,3	0,2
28	other aggravated weather conditions	0,4	0,4	0,4	2,4	0,2
52	Incorrect lane positioning	0,3	0,1	0,6	1,5	0,2
53	Passengers (comfort, distraction...)	0,3	0,1	0,6	1,5	0,2
54	Blind spot	0,3	0,1	0,6	1,5	0,2
55	Defective street lighting	0,3	0,1	0,6	1,5	0,2
45	62 near junctions, traffic lights or pedestrian crossings with heavy traffic at other places:	0,2	0,2	0,2	1,2	0,2
44	65 by other improper behaviour	0,2	0,2	0,2	1,2	0,2
36	Dazzled	0,2	0,2	0,3	1,4	0,2
67	Defective steering/suspension	0,2	0,2	0,3	1,3	0,2
43	15 Abrupt braking without compelling reason by the vehicle in front	0,2	0,2	0,2	1,2	0,2

8	State of the carriageway.	1,4	1,3	1,5	7,7	0,2
42	55 Other faults	0,2	0,2	0,2	1,2	0,2
29	old tyres	0,4	0,3	0,5	2,1	0,2
41	24 Failure to observe the priority of oncoming cars when driving past stationary vehicles, barriers or obstacles (§ 6) (except pos. 32)	0,2	0,2	0,2	1,2	0,2
34	Ignored lights at crossing	0,4	0,1	0,8	1,9	0,2
66	Overloaded vehicle	0,3	0,2	0,3	1,3	0,2
28	walking on the road	0,4	0,4	0,5	2,1	0,2
65	Cyclist wearing dark clothing at night	0,3	0,2	0,3	1,3	0,2
64	Vision affected by buildings etc	0,3	0,2	0,3	1,3	0,2
40	87 Other animal on the carriageway	0,2	0,2	0,3	1,2	0,2
27	others	0,4	0,4	0,5	2,1	0,2
38	drugs	0,3	0,1	0,7	1,3	0,2
39	overtaking despite following traffic	0,3	0,1	0,7	1,3	0,2
40	mistake when being overtaken	0,3	0,1	0,7	1,3	0,2
41	rail-bound vehicles	0,3	0,1	0,7	1,3	0,2
42	other mistakes by pedestrians	0,3	0,1	0,7	1,3	0,2
43	dazzle, glare	0,3	0,1	0,7	1,3	0,2
44	other obstacles	0,3	0,1	0,7	1,3	0,2
51	Distraction – non driving task	0,3	0,1	0,7	1,5	0,2
35	Overtaking a moving vehicle	0,3	0,2	0,4	1,4	0,2
39	60 at places where the pedestrian traffic was controlled by policemen or traffic lights	0,3	0,3	0,3	1,2	0,2
26	walking through the road on the left	0,5	0,4	0,6	2,1	0,2
63	Disobeyed double white lines	0,3	0,3	0,3	1,3	0,2
62	No lights at night	0,3	0,3	0,3	1,3	0,2
61	Temporary road layout	0,3	0,3	0,3	1,3	0,2
33	Surroundings obscured by buildings, fences, vegetation	0,4	0,2	0,9	1,9	0,2
60	Dazzling headlights	0,3	0,3	0,3	1,3	0,2
38	38 at pedestrian crossings	0,3	0,3	0,3	1,2	0,2
59	Vehicle travelling along pavement	0,3	0,3	0,4	1,3	0,2
37	32 Failure to observe the priority of oncoming vehicles (traffic sign No. 208 of Road Traffic Regulations)	0,3	0,3	0,3	1,2	0,2
50	other	0,4	0,1	0,8	1,5	0,3
27	outlook covered by parking vehicle	0,6	0,6	0,6	2,4	0,3
25	other infractions	0,5	0,5	0,6	2,1	0,3
37	snow, ice	0,3	0,1	0,8	1,3	0,3
34	Incorrectly overtaking on the right	0,3	0,3	0,5	1,4	0,3
36	39 at central islands	0,3	0,3	0,3	1,2	0,3
35	51 Tyres	0,3	0,3	0,3	1,2	0,3
31	Tyre pressures wrong	0,5	0,2	1,0	1,9	0,3
32	Poor surface at site	0,5	0,2	1,0	1,9	0,3
34	21 Mistake made when returning to right lane	0,3	0,3	0,3	1,2	0,3
33	56 Influence of alcohol	0,3	0,3	0,3	1,2	0,3
24	U turn	0,6	0,5	0,7	2,1	0,3
32	02 Influence of other intoxicating substances (e.g. drugs, narcotics)	0,3	0,3	0,4	1,2	0,3
23	escape	0,6	0,5	0,7	2,1	0,3
47	Avoidance manoeuvre due to other vehicle	0,4	0,2	0,9	1,5	0,3
48	Reversed road camber	0,4	0,2	0,9	1,5	0,3
49	Wind	0,4	0,2	0,9	1,5	0,3
33	Incorrectly maneuvering to stop	0,4	0,3	0,5	1,4	0,3
58	Door opened carelessly	0,4	0,4	0,4	1,3	0,3
28	Interaction or competition with other road users	0,6	0,2	1,1	1,9	0,3
29	Tyre deflated before impact	0,6	0,2	1,1	1,9	0,3
30	Glare from sun	0,6	0,2	1,1	1,9	0,3
32	Driving without respecting the speed limits	0,4	0,3	0,5	1,4	0,3
57	Disability or illness	0,4	0,4	0,4	1,3	0,3
35	overtaking despite inadequate visibility	0,4	0,1	0,8	1,3	0,3
36	stopping, parking	0,4	0,1	0,8	1,3	0,3
26	dazzled by sun	0,7	0,7	0,8	2,4	0,3
31	Driving without respecting transit or access signs	0,4	0,3	0,5	1,4	0,3
7	Drowsiness or illness.	2,4	2,3	2,5	7,7	0,3
30	Side skid for driving with exceeding speed	0,4	0,3	0,5	1,4	0,3
56	Vision affected by vegetation	0,4	0,4	0,5	1,3	0,3
25	influenced by avoiding to the wild or domestic animals	0,8	0,7	0,8	2,4	0,3
55	Vehicle in course of crime	0,4	0,4	0,5	1,3	0,3
44	No vehicle lighting (case vehicle)	0,5	0,2	1,0	1,5	0,3
45	Failed to look, looked but did not see...	0,5	0,2	1,0	1,5	0,3
46	Poor infrastructure design	0,5	0,2	1,0	1,5	0,3
22	standing on the sidewalk	0,7	0,6	0,8	2,1	0,3
31	69 Other improper behaviour of pedestrians	0,4	0,4	0,4	1,2	0,3
29	Maneuvering	0,5	0,4	0,6	1,4	0,3
26	Other vehicle-factor (give details) (63)	0,6	0,3	1,2	1,9	0,3
27	Surroundings obscured by stationary or parked car	0,6	0,3	1,2	1,9	0,3
30	45 Behaviour contrary to traffic regulations when getting on or off a vehicle, loading or unloading	0,4	0,4	0,4	1,2	0,3
54	Impaired by drugs	0,5	0,4	0,5	1,3	0,4
29	20 Overtaking without observing the rear traffic and/or without timely and clearly indicating the intention to swerve out	0,4	0,4	0,4	1,2	0,4
34	mistake in returning to correct lane	0,5	0,2	0,9	1,3	0,4
28	03 Overfatigue	0,4	0,4	0,5	1,2	0,4
53	Inexperience of driving on left	0,5	0,4	0,5	1,3	0,4
28	Sudden illness	0,5	0,4	0,6	1,4	0,4
24	fog	0,9	0,8	0,9	2,4	0,4
43	Sensory deficiency	0,6	0,3	1,1	1,5	0,4
27	82 Dazzling sunshine	0,5	0,4	0,5	1,2	0,4
24	Bend or winding road at site	0,7	0,3	1,3	1,9	0,4
25	Other local-factor (give details) (74)	0,7	0,3	1,3	1,9	0,4
52	Emergency vehicle on call	0,5	0,5	0,5	1,3	0,4
26	40 when turning	0,5	0,5	0,5	1,2	0,4
51	Disobeyed pedestrian crossing	0,5	0,5	0,5	1,3	0,4
23	dry, polluted (sand, leaves, gravel etc.)	0,9	0,9	1,0	2,4	0,4
27	Incorrectly crossing	0,5	0,4	0,7	1,4	0,4
25	86 Wild animals on the carriageway	0,5	0,5	0,5	1,2	0,4

26	Other misuse	0,5	0,4	0,7	1,4	0,4
50	Inadequate/masked signs or markings	0,5	0,5	0,6	1,3	0,4
32	failure to observe priority of oncoming traffic	0,5	0,2	1,0	1,3	0,4
33	pedestrian at stops	0,5	0,2	1,0	1,3	0,4
22	glaze, hardened snow - sprinkled	1,0	0,9	1,0	2,4	0,4
21	bad due to permanent vegetation (trees, bushes etc.)	1,0	0,9	1,0	2,4	0,4
22	Impairment through illness	0,8	0,4	1,4	1,9	0,4
23	Distraction through stress or emotional state of mind	0,8	0,4	1,4	1,9	0,4
40	Driving without licence	0,6	0,3	1,2	1,5	0,4
41	Navigation	0,6	0,3	1,2	1,5	0,4
42	Wheel lock-up	0,6	0,3	1,2	1,5	0,4
24	63 by suddenly emerging from behind obstacles obstructing the visibility	0,5	0,5	0,5	1,2	0,4
24	Side skid for avoiding an accident	0,6	0,5	0,7	1,4	0,4
25	Other condition	0,6	0,5	0,7	1,4	0,4
29	overtaking despite oncoming traffic	0,6	0,3	1,1	1,3	0,5
30	failure to consider following traffic	0,6	0,3	1,1	1,3	0,5
31	rain	0,6	0,3	1,1	1,3	0,5
6	Driver's lack of experience.	3,6	3,5	3,8	7,7	0,5
21	Not respecting crossing regulations	1,0	0,9	1,1	2,1	0,5
20	bad due to surrounding constructions (buildings, full railing, scaffold etc.)	1,1	1,1	1,2	2,4	0,5
49	Pedestrian wearing dark clothing at night	0,6	0,6	0,7	1,3	0,5
48	Defective brakes	0,6	0,6	0,7	1,3	0,5
5	Alcohol or drugs.	3,8	3,6	3,9	7,7	0,5
19	continuous snow layer, slush	1,2	1,1	1,2	2,4	0,5
34	Incorrect headway	0,8	0,4	1,3	1,5	0,5
35	Habit	0,8	0,4	1,3	1,5	0,5
36	Inattention	0,8	0,4	1,3	1,5	0,5
37	illness	0,8	0,4	1,3	1,5	0,5
38	Contrast	0,8	0,4	1,3	1,5	0,5
39	Black ice	0,8	0,4	1,3	1,5	0,5
23	04 Other physical or mental faults	0,6	0,6	0,6	1,2	0,5
23	Crossing on a footpath not regulated by traffic lights or by policeman	0,7	0,6	0,8	1,4	0,5
27	at pedestrian crossings	0,6	0,3	1,2	1,3	0,5
28	pedestrian when turning off	0,6	0,3	1,2	1,3	0,5
47	Poor or defective road surface	0,7	0,6	0,7	1,3	0,5
20	Impairment through drugs	1,0	0,5	1,6	1,9	0,5
21	Distraction through physical object outside of vehicle	1,0	0,5	1,6	1,9	0,5
22	Not giving the priority to pedestrian on the pedestrian crossing	0,7	0,6	0,9	1,4	0,5
21	Not driving on the right side of the roadway	0,7	0,6	0,9	1,4	0,5
20	rearwards movement	1,2	1,1	1,3	2,1	0,6
19	Impairment through fatigue	1,1	0,6	1,7	1,9	0,6
46	Stolen vehicle	0,8	0,7	0,8	1,3	0,6
19	exceeding speed	1,2	1,1	1,4	2,1	0,6
33	Carriageway/shoulder grip differential	0,9	0,5	1,5	1,5	0,6
45	Defective tyres	0,8	0,7	0,8	1,3	0,6
20	Incorrectly turning on the right	0,8	0,7	1,0	1,4	0,6
44	Wrong use of pedestrian crossing	0,8	0,7	0,8	1,3	0,6
22	22 Other mistakes made when overtaking (e.g. without sufficient lateral distance; at pedestrian crossings, (cf. pos. 38, 39)	0,7	0,7	0,7	1,2	0,6
18	View obscured from window	1,1	0,6	1,8	1,9	0,6
18	tired, fall asleep	1,5	1,4	1,5	2,4	0,6
17	icing, glaze formation	1,5	1,5	1,6	2,4	0,6
18	other actions	1,4	1,2	1,5	2,1	0,6
43	Illegal turn/direction	0,8	0,8	0,9	1,3	0,6
17	suddenly crossing a road	1,4	1,2	1,5	2,1	0,6
42	Unfamiliar with model of vehicle	0,9	0,8	0,9	1,3	0,7
4	Other factor.	5,2	5,0	5,3	7,7	0,7
16	overtaking on the left	1,4	1,3	1,6	2,1	0,7
41	Cyclist entering road from pavement	0,9	0,8	0,9	1,3	0,7
21	17 Overtaking in spite of oncoming traffic	0,8	0,8	0,9	1,2	0,7
16	at night, without public lighting - deteriorated due to weather conditions (fog, snowfall, rainfall etc.)	1,7	1,6	1,8	2,4	0,7
19	Incorrectly stopped vehicle	1,0	0,8	1,1	1,4	0,7
15	sudden brake	1,5	1,4	1,7	2,1	0,7
18	Steering for turning on the left (private acces, petrol station)	1,0	0,8	1,2	1,4	0,7
15	other unfavourable condition	1,8	1,7	1,8	2,4	0,7
20	18 Overtaking in spite of unclear traffic situation	0,9	0,9	0,9	1,2	0,8
17	Overtaking in an intersection	1,0	0,9	1,2	1,4	0,8
14	avoiding obstacle on the left manoeuvre	1,7	1,5	1,8	2,1	0,8
16	Driving without respecting the traffic light or police order	1,1	0,9	1,3	1,4	0,8
14	other influence	2,0	1,9	2,0	2,4	0,8
15	Side skid for careless driving	1,1	1,0	1,3	1,4	0,8
13	at night, with public lighting - deteriorated due to weather conditions (fog, snowfall, rainfall etc.)	2,0	1,9	2,1	2,4	0,8
12	snowfall	2,0	1,9	2,1	2,4	0,8
13	parking	1,9	1,7	2,0	2,1	0,9
40	Vehicle blind spot	1,1	1,1	1,2	1,3	0,9
39	Dangerous action in carriageway	1,1	1,1	1,2	1,3	0,9
38	Animal/Object in carriageway	1,2	1,1	1,2	1,3	0,9
37	Illness or disability	1,2	1,2	1,3	1,3	0,9
19	26 Incorrectly changing the lane when driving side by side or failure to observe the "zip method" (merging of two queues with alternate priority of the respective cars	1,1	1,1	1,2	1,2	0,9