World Health Organization

REGIONAL OFFICE FOR **Europe**

EUROPEAN REGIONAL STATUS REPORT ON ROAD SAFETY
2019

World Health Organization

North Macedonia
Population: 2 081 206 | Income group: Middle |
Gross national income per capita: US$ 4 980

INSTITUTIONAL FRAMEWORK	
Lead agency	Republic Council on Road Traffic Safety and Coordination Body of the Government of North Macedonia
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	Reduction of fatalities to EU average, reduction of young driver victims by 30%, and zero child victims (2015 - 2020)

SAFER ROADS AND MOBILITY	
Audits or star rating required for new road infrastructure	Partial
Design standards for the safety of pedestrians / cyclists	Yes
Inspections / star rating of existing roads	Yes
Investments to upgrade high risk locations	No
Policies & investment in urban public transport	Yes

SAFER VEHICLES	
Total registered vehicles for 2015	442 962
Cars and 4-wheeled light vehicles	383 833
Motorized 2- and 3-wheelers	10 050
Heavy trucks	45 836
Buses	3 243
Other	0
Vehicle standards applied (UNECE WP.29)	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No
Motorcycle anti-lock braking system	No

POST-CRASH CARE	
National emergency care access number	National, single number
Trauma registry	National
Formal certification for prehospital providers	Yes
National assessment of emergency care systems	Yes

DATA	
Reported road traffic fatalities (2015)	148 (80% M, 20% F)
Reported rate per 100 000 population (2015)	7.1
WHO estimated road traffic fatalities (2016)	134
WHO estimated rate per 100 000 population (2016)	6.4

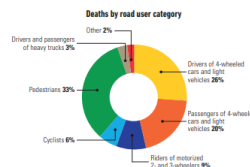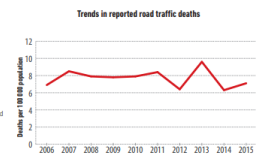| SAFER ROAD USERS	
National speed limit law	Yes
Max urban speed limit	50 km/h
Max rural speed limit	90 km/h
Max motorway speed limit	130 km/h
Local authorities can modify limits	No
Self-reported enforcement	0 1 2 3 4 5 6 7 8 9 10
Predominant type of enforcement	Manual
National drink-driving law	
BAC limit – general population	≤ 0.05 g/dl
BAC limit – young or novice drivers	≤ 0.01 g/dl
Random breath testing carried out	Yes
Testing carried out in case of fatal crash	All drivers tested
Self-reported enforcement	0 1 2 3 4 5 6 7 8 9 10
% road traffic deaths involving alcohol	1%
National motorcycle helmet law	Yes
Applies to drivers and passengers	Yes
Helmet fastening required	No
Helmet standard referred to and/or specified	No
Children passengers on motorcycles	Not restricted
Self-reported enforcement	0 1 2 3 4 5 6 7 8 9 10
Helmet wearing rate	–
National seat-belt law	Yes
Applies to front and rear seat occupants	Yes
Self-reported enforcement	0 1 2 3 4 5 6 7 8 9 10
Seat-belt wearing rate	20% Front seats, 3% Rear seats
National child restraint law	
Children seated in front seat	Prohibited under 12 yrs
Child restraint required	Up to 5 yrs
Child restraint standard referred to and/or specified	No
Self-reported enforcement	0 1 2 3 4 5 6 7 8 9 10
% children using child restraints	–
National law on mobile phone use while driving	Yes
Ban on hand-held mobile phone use	Yes
Ban on hands-free mobile phone use	No
National drug-driving law	Yes

Deaths by road user category

- Other 2%
- Drivers and passengers of heavy trucks 3%
- Pedestrians 33%
- Cyclists 6%
- Riders of motorized 2- and 3-wheelers 8%
- Passengers of 4-wheeled cars and light vehicles 20%
- Drivers of 4-wheeled cars and light vehicles 26%

Source: 2015, Ministry of Interior and State Statistical Office

Trends in reported road traffic deaths

Source: State Statistical Office and Ministry of Interior

Organisation mondiale de la Santé — BUREAU RÉGIONAL DE L' **Europe**

Weltgesundheitsorganisation — REGIONALBÜRO FÜR **Europa**

Всемирная организация здравоохранения — Европейское региональное бюро

Official vs WHO Estimate 2016

- ALB
  - Reported 269
  - Estimate 399
- BIH
  - Reported 318
  - Estimate 552

- MKD
  - Reported 148
  - Estimated 134
- MNE
  - Reported 65
  - Estimate 67
- SRB
 - Reported 607
  - Estimated 649

Status Report Groupings

- Group 1- Countries with death registration data
  - Countries where the latest death registration data submitted to WHO are earlier than 2015 but not earlier than 2007. Deaths in year 2016 were estimated based on a projection of the most recent death registration data using the trends in reported surveillance data (SRB)
  - Countries where the reported number of road-traffiic deaths adjusted to unlimited time for 2016 exceeded the estimate based on death registration data. (MNE, MKD)
- Group 2- Countries with other sources of information on causes of death
- Group 3 -Countries with populations less than 150 000
- Group 4 -Countries without eligible death registration data (ALB, BIH)

Death cause registry

- Routine submission of death cause registry data to WHO
- Health/Statistics/Information etc
- Last year of data received by WHO
  - ALB 2010 (incomplete)
  - BIH 2016 (incomplete)
  - KOS (no data)
  - MKD 2013
  - MNE 2009
  - SRB 2016

DCR data for road trauma SRB 2016
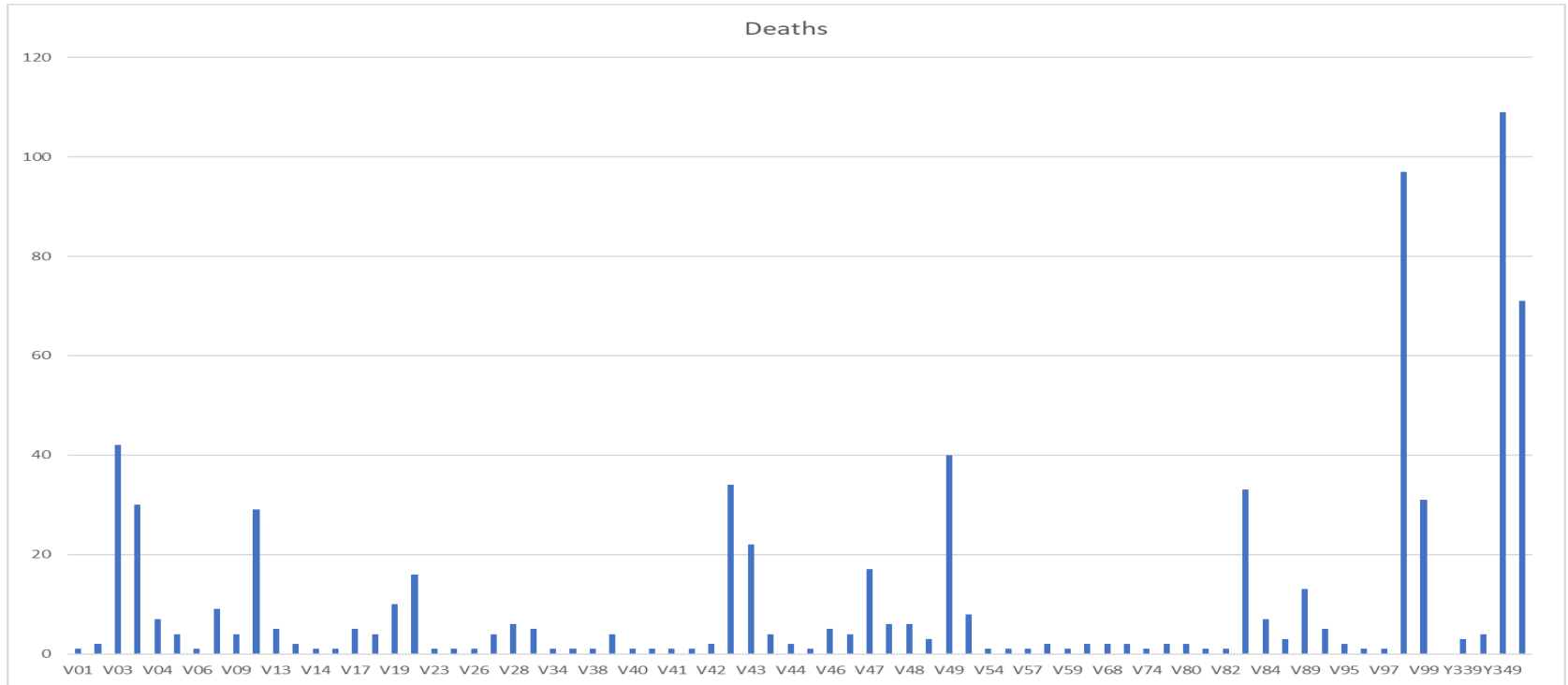
Top 10 causes of death in North Macedonia for both sexes aged 15 to 19 years (2019)

Filters

Country

North Macedonia ▼

Year

2019 ▼

Sex

Both sexes ▼

Age group

15 to 19 years ▼

Top 10 causes of death

Cause	Deaths per 100 000 population
Road injury	3.4
Self-harm	3.35
Cardiomyopathy, myocarditis, endocarditis	2.65
Congenital anomalies	2.1
Lower respiratory infections	2.05
Stroke	1.6
Leukaemia	1.5
Interpersonal violence	1.45
Brain and nervous system cancers	1.3
Chronic obstructive pulmonary disease	0.85

Deaths per 100 000 population
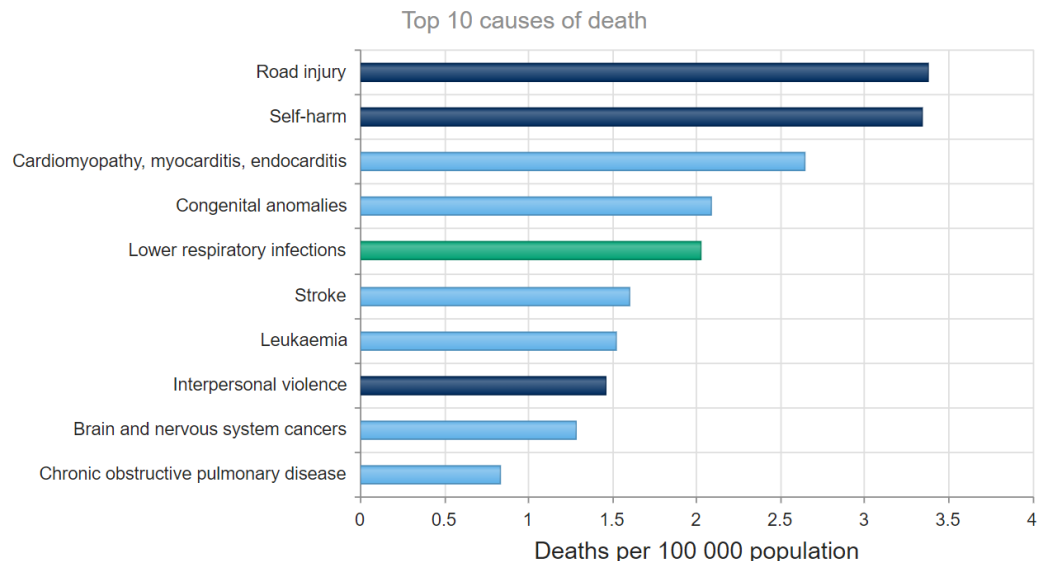
■ Communicable, maternal, perinatal and nutritional conditions
■ Non-communicable diseases
■ Iniuries

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Weltgesundheitsorganisation REGIONALBÜRO FÜR Europa

Всемирная организация здравоохранения Европейское региональное бюро

WHO estimated road traffic fatalities (2016)

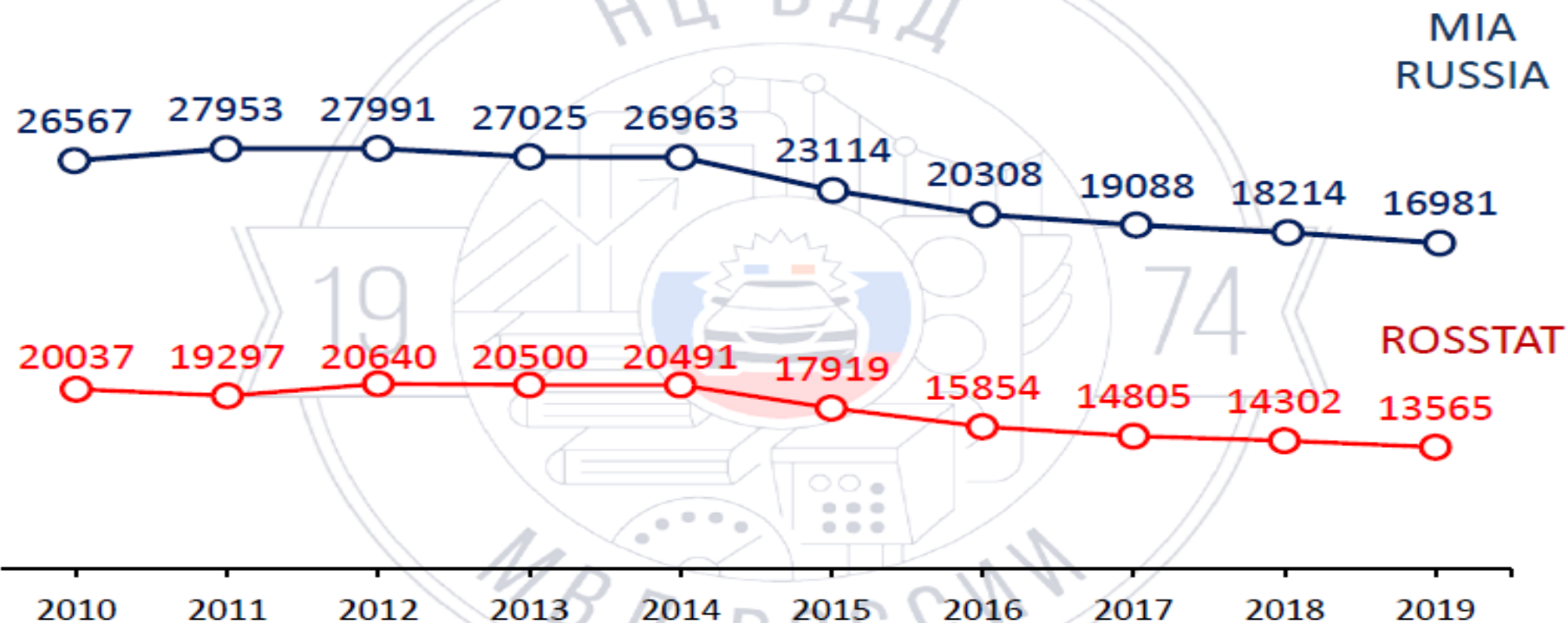| DATA	
Reported road traffic fatalities (2016)	20 308 [a] (72% M, 25% F)
WHO estimated road traffic fatalities (2016)	25 969
WHO estimated rate per 100 000 population (2016)	18
Ministry of Internal Affairs of the Russian Federation. Died within 30 days of crash	

1. The year for which civil registration and vital statistics (CRVS) data is available
   - Received 2011 => projected to **2016**

2. Proportion of unidentified or ill-identified causes of deaths
   - **Adjustment** was made based on average from other countries

3. The coverage of the CRVS data (how much of the population it covers)
   - <100% => adjusted to **100%**

MIA RUSSIA

MEDICAL ORGANIZATIONS

ACCIDENT DETAILS

CIVIL REGISTRY OFFICE

INFORMATION ABOUT INJURIES, POISONING AND SOME EXTERNAL EFFECTS

ROSSTAT

1. INDICATORS OF SOCIO-ECONOMIC DEVELOPMENT
2. INDICATORS OF ACHIEVING THE SUSTAINABLE DEVELOPMENT TARGETS
3. ROAD SAFETY
4. DEMOGRAPHIC INDICATORS
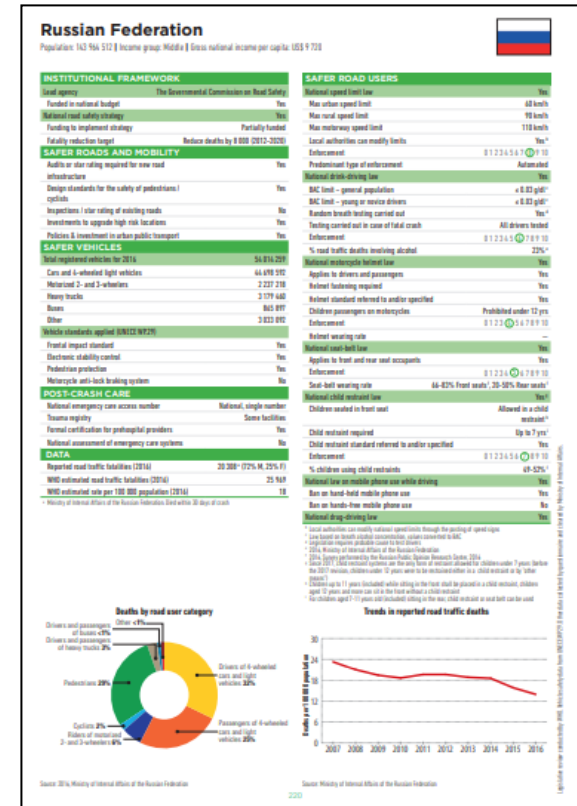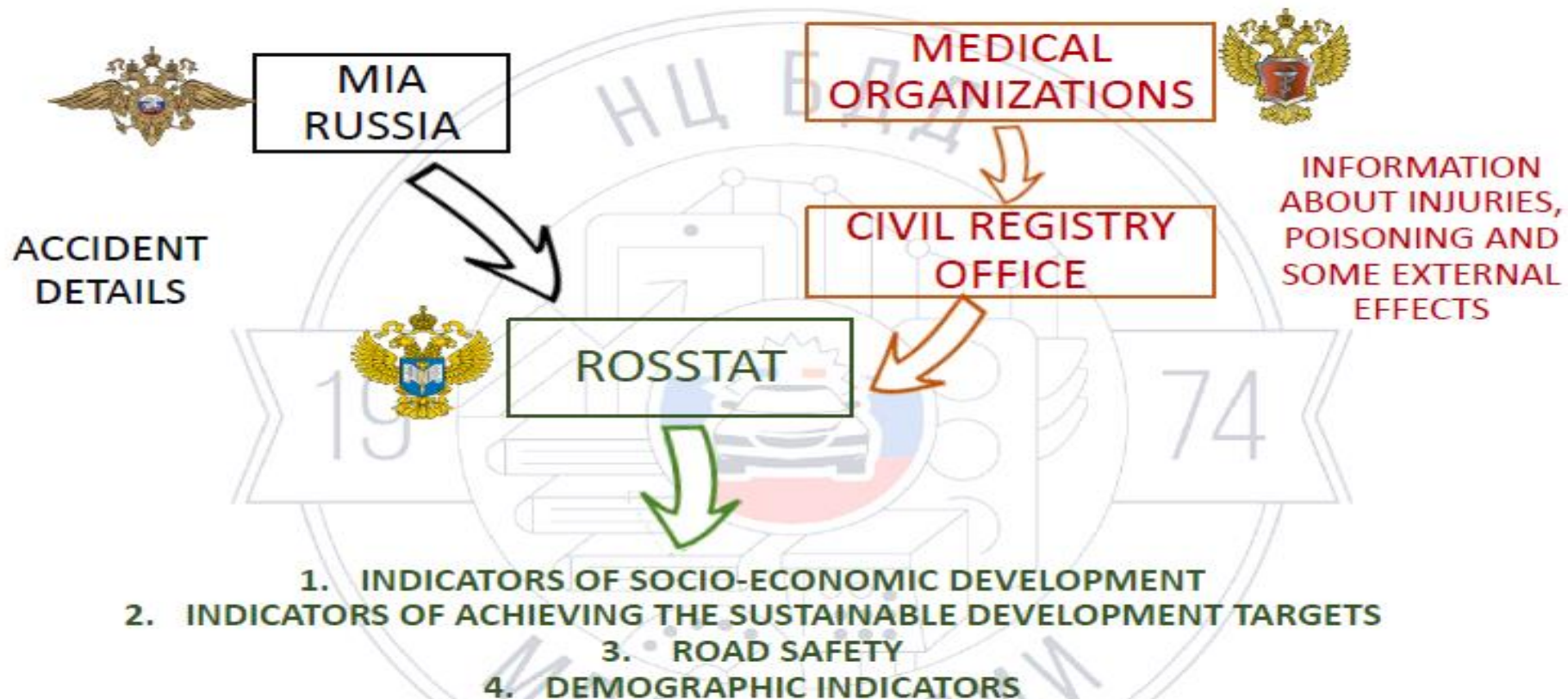
DYNAMICS OF THE NUMBER OF FATALITIES IN ACCIDENTS IN DIFFERENT ACCOUNTING SYSTEMS

MIA RUSSIA

26567   27953   27991   27025   26963   23114   20308   19088   18214   16981

ROSSTAT

20037   19297   20640   20500   20491   17919   15854   14805   14302   13565

2010   2011   2012   2013   2014   2015   2016   2017   2018   2019

UN-ROAD AND UNRECISED INCIDENTS

ROSSTAT / MINISTRY OF HEALTH OF RUSSIA

MIA RUSSIA

ROSSTAT 15805

IN CITIES AND LOCATIONS

ON HIGHWAYS

8991; 47%

9514; 50%

UNRECISED 451

Accidents which took place out of public roads 1727

583; 3%

ACCIDENTS WHICH TOOK PLACE OUT OF PUBLIC ROADS

Error in the data received for 2015 for Y32-Y34 codes

Data received by WHO

СТРАНА	ГОД	ФОРМАТ общ. см.	ФОРМАТ млад.см.	ПРИЧИНА	ПОЛ	МКБ	ПРОБЕЛ	Все возраста	
RU	2015	1	8	Y32	1	315		2084	3174
RU	2015	1	8	Y32	2	315		1090	
RU	2015	1	8	Y33-Y34	1	315		155	220
RU	2015	1	8	Y33-Y34	2	315		65	

Смертность в разбивке по причинам смерти, полу и возрасту (данные, содержащиеся в этой таблице, приводяться только для примера)

Ill-defined causes of injuries

- **Y32:** crashing of motor vehicle, undetermined intent

- **Y33:** Other specified events, undetermined intent

- **Y34:** Unspecified event, undetermined intent

Actual Data

	Y32	Y33	Y34	Ex.Causes	%
2000	328	9707	10333	318545	6,4
2001	302	9870	8749	330731	5,7
2002	335	9605	7468	339517	5,1
2003	376	9002	6471	335008	4,7
2004	368	8940	6123	327216	4,7
2005	318	8298	5711	316021	4,5
2006	348	6555	4958	282267	4,2
2007	411	6294	4745	259592	4,4
2008	380	6032	4411	244341	4,4
2009	353	5363	3582	224261	4,1
2010	375	5488	3235	215446	4,2
2011	317	5453	3582	199043	4,7
2012	301	4521	3380	193669	4,2
2013	254	3841	2746	185341	3,7
2014	280	3594	2356	186712	3,3
2015	218	3145	2193	177572	3,1
2016	204	2853	1993	167348	3,0
2017	248	2410	1495	151899	2,7

An example of coding error

THE FALL OF THE BUS IN THE BLACK SEA AREA IN PORT.

According to the Ministry of Internal Affairs of Russia: **21 PEOPLE** died as a result of road accidents

ACCORDING TO ROSSTAT DATA: **21 PEOPLE** DIED FROM ASFIXIA

CONCLUSIONS OF THE FORENSIC EXPERTISE: **9 PEOPLE** DIED IN THE RESULT OF "MECHANICAL ASFIXIA FROM CLOSING THE CLEARANCE OF THE AIRWAYS BY WATER DURING DROWNING "AND **12 PEOPLE** DIED FROM THE INJURIES RECEIVED AT THE MOMENT OF THE BUS

FALLING CONCLUSIONS OF THE COURT: DRIVER CONSIDERED FOR THE DEATH OF **21 PERSONS** AS A RESULT OF ACCIDENT

WHO methodology for adjustment with RosStat Data

1. The year for which CRVS data is available
   - ✖ 2016 – **no need to project**
2. Proportion of unidentified or ill-identified causes of deaths
   - ✔ Received Y32-Y34; **adjustment made**
3. The coverage of the CRVS data (how much of the population it covers)
   - ✖ 100% - **no adjustment is needed**

Road Traffic Deaths (CRVS)
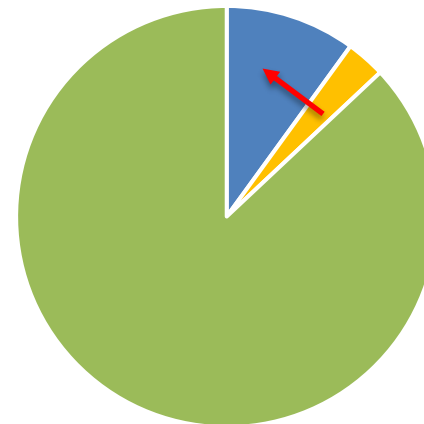
■ Road Traffic Death   ■ Y32-Y34   ■ Other causes

Preliminary Results

Original WHO estimate	**25,969**
Estimation using new RosStat Data	**20,102**
Estimation using 4-digit detailed codes	**~18,000**
Police data (based on 30 days)	**20,308**
Police data (after adjusting to 1 year) New WHO estimate	**20,938 = 20,308*1.031**

RosStat

- Progress made:
  - ✅ Have received revised and updated data from 2007- 2017
  - ✅ Have received a national short list (>300 codes)
  - ✅ Reviewed death certificate
  - ✅ Reviewed data flow and process
  - ❌ Share detailed, 4-digit coded data to enable comprehensive analysis of data reflecting more accurate situation of the country

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Всемирная организация здравоохранения
Европейское региональное бюро

Recommendation #1

Timely sharing of data with international partners

- Lag between data collection and dissemination should not be more than 18 months
- Sent data as soon as available as required by WHO nomenclature regulation

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Recommendation #2

Review medical certificate, medical certification and coding practices and aligning them with international best practices

Recommendation #3
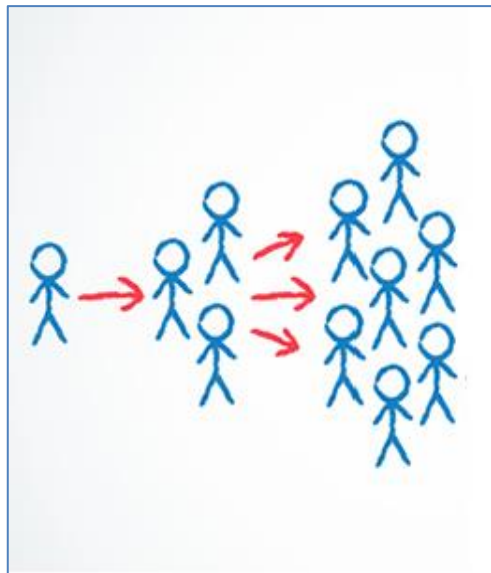
Improve the dissemination of cause of death data

- Revise national short-list to include road traffic deaths according to WHO's definition

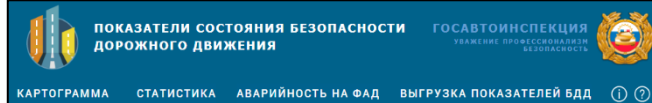- Include cause groups needed to monitor global SDG indicators

Recommendation #4

Establish mechanisms between key stakeholders (MoH, MoI, RosStat) to exchange information for improving the quality of data

Recommendation #5

Sharing of Russian experiences and success stories of police data registration system across the WHO European Region

- – European status report on road safety
- – International meeting of road safety partners

Next Global Status Report

- Commence in 2022
- To be launched in 2023
- Baseline DOA (2021)
- Same process/same methodology
- Working closely with WBRSO (all RSO)
- New dimensions to be further incorporated
  - Serious injury, financing, enforcement,
- Updated DCR submitted to WHO