

FEDERAL RESEARCH INSTITUTE FOR HEALTH ORGANIZATION AND INFORMATICS OF MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

## **Alcohol-related mortality in Russia**

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## Major risk factors in Russia

Alcohol abuse

Tobacco use

Suboptimal nutrition

Obesity

High blood pressure

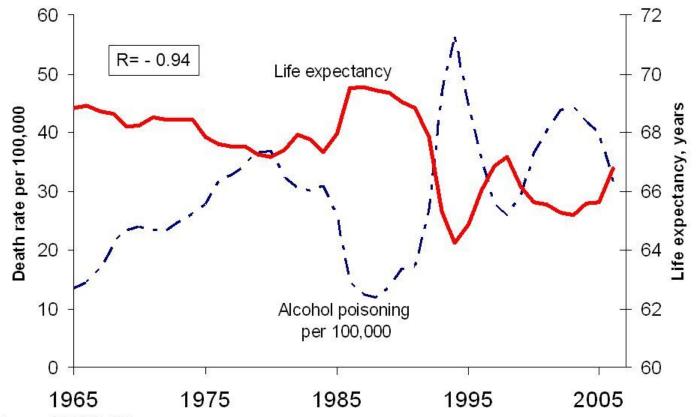
Drug use

## Alcohol-related mortality in Russia

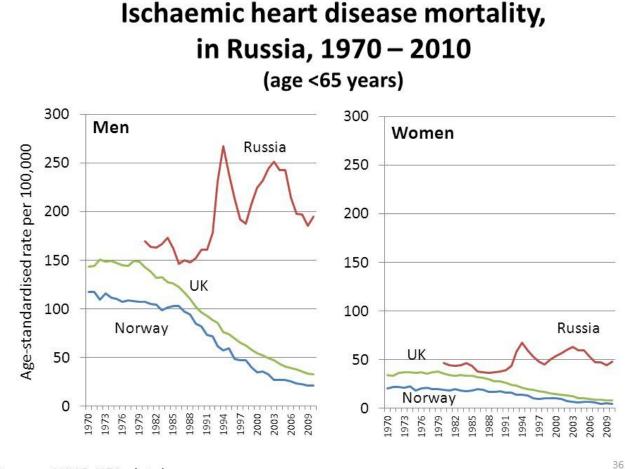
Evidence for high levels of alcohol-related mortality in Russia



Mortality from accidental poisoning and life expectancy in Russia, 1965-2005



Source : VM Shkolnikov



1987 - anti-alcohol campaign ceased 1991 - economic transition + vodka prices frozen 1993-1995 - Import of untaxed vodka and ethyl ethanol 1995 - ban of untaxed import 2000 and on - income growth 2006 - anti-surrogate laws

1985-1987 - anti-alcohol

campaign



Source : WHO HFA database (Leon 2015)

## Forensic autopsy data

High number of autopsied people who died with high levels of alcohol in biological liquids

Kursk, 1991 - 29% of men, 9% of women, 1991 г.<sup>1</sup>

Izhevsk, late 1990es - 47% of men 20–55 y.o., 1998-1999<sup>2</sup>

Barnaul - 53% of men, 42% of women , 1990–2004<sup>3</sup>

Krasnodar - 55% of deaths from trauma, 2000-2004<sup>4</sup>

#### Current estimate for Moscow working age males is about 40%

<sup>1</sup> Tishchuk, E.A. 1997. Public health of the Russian Federation, 2: 3436 (in Russian).

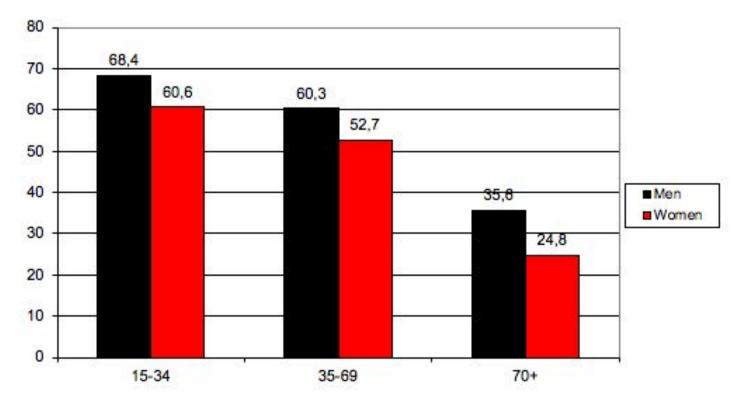
<sup>2</sup> Policy on the control of crisis mortality in the transition period / Ed. V.M. Shkolnikov, V.V. Chervyakov. M .: UNDP, 2000. P. 191. (in Russian)

<sup>3</sup> Zaridze D., Maximovitch D., Lazarev A., Igitov V., Boroda A., Boreham J., Boyle P., Peto R., Boffetta P. Alcohol poisoning is a main determinant of recent mortality trends in Russia: evidence from a detailed analysis of mortality statistics and autopsies. *International Journal of Epidemiology* 38/1 (2009): 142–153.

<sup>4</sup> Redko, A N, Sakharova, PB 2006, Alcohol factor in the problem of premature mortality of the population. *Premature and preventable mortality in Russia - the criteria for the loss of public health*. Mosocw: FRIHOI. P. 223-238 (in Russian).

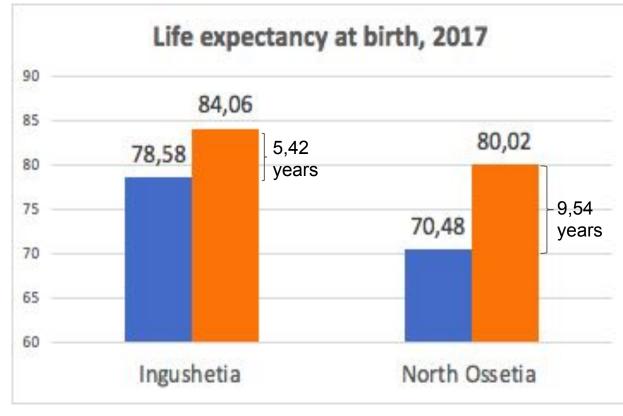
## 2. Forensic autopsy data from Barnaul

% of people died with increased alcohol content in Barnaul, 1990-2004



Source: Zaridze et al., 2009.

## 3. Regional demographic data



#### Two North Caucasian societies



The gap between male and female life expectancy is much greater in North Ossetia than in non-drinking Ingushetia.

Age	Infectious and parasitic diseases	Neoplasms	Cardiovascular diseases	Respiratory diseases	Diseases of the digestive system	Other diseases	External causes	All causes
0	30	3	6	65	4	400	53	561
1-4	12	11	0	18	2	44	90	177
5-9	3	5	1	6	1	21	84	121
10-14	1	6	4	3	1	24	112	151
15-19	6	14	23	11	6	29	436	525
20-24	51	15	66	25	36	68	878	1139
25-29	208	22	225	79	131	174	1316	2155
30-34	312	36	480	146	241	262	1554	3031
35-39	273	56	693	185	274	255	1397	3133
40-44	247	89	1147	245	291	243	1484	3746
45-49	250	131	1701	302	259	208	1442	4293
50-54	216	212	2409	360	226	169	1388	4980
55-59	141	256	3274	370	216	88	1146	5491
60-64	66	-68	3860	275	153	-69	828	5045
65-69	-16	-559	4203	178	-16	-307	527	4010
0-69	1800	229	18092	2268	1825	1609	12735	38558
Legend More than 1000 Note: Tables compiled by the HSE Institute of Demography								Less than 50

Note: Tables compiled by the HSE Institute of Demography.

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Tabular numbers of excess male deaths in the age below 70 in Russia (2008) in comparison with Germany (2007), per 100 000 dead in all ages and from all the causes

## Alcohol-related violent crimes

A content analysis study of 348 thousands texts of court decisions on criminal cases in the Russian Federation in 2012 showed high number of crimes committed in drunk state, including:

- 82% of murders
- 73% of cases of violence against a representative of the authorities
- 66% of murders in excess of limits of self-defense
- 65% of cases of harm to health when exceeding the limits of self-defense
- 61% of cases of causing serious harm to health through negligence
- 58% of cases of intentionally causing serious injury
- 51% of murders in the state of affect
- 51% of cases of intentionally causing minor injury
- 50% of battery crimes
- 50% of homicides par imprudence
- 50% of hooliganism cases
- 47% of cases of providing knowingly false information about an act of terrorism

Source: Zakirov R. All the vodka you cannot drink. *Law*. 22.10.2014. <u>https://zakon.ru/blog/2014/10/22/vsej\_vodki\_ne\_vypesh</u>

## Evidence for disproportionate harm of distilled spirits

**RLMS** cohort

Denisova, I. (2010). Alcohol Consumption in Russia: Influence on Health and Mortality. Moscow: New Economic School. No. 31, March 2010 (in Russian)

Kueng L. and Yakovlev E. The Long-Run Effects of a Public Policy on Alcohol Tastes and Mortality. Moscow: NES, 2018

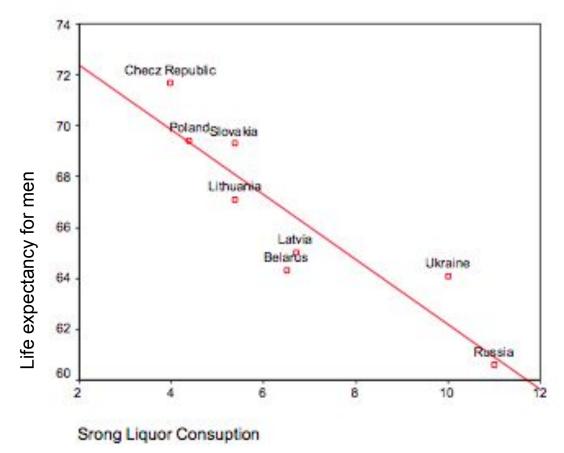
Barnaul, Byisk and Tomsk study

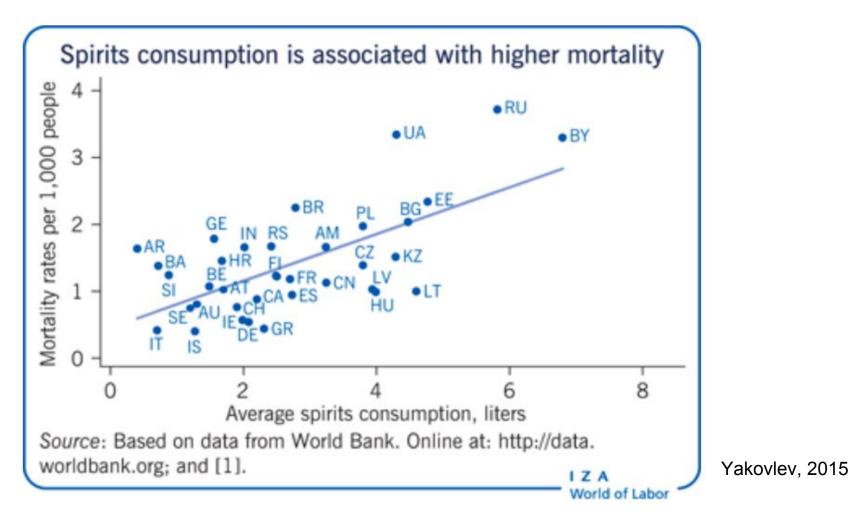
Zaridze, D., et al. (2014). Alcohol and mortality in Russia: prospective observational study of 151 000 adults. *The Lancet*, *383*(9927), 1465-1473.

**Ecological studies** 

Spirits Consumption (Liters of Ethanol per Adult per Year) and Life Expectancy for Men in

**Northern Post-Socialist European Countries in 2001** 





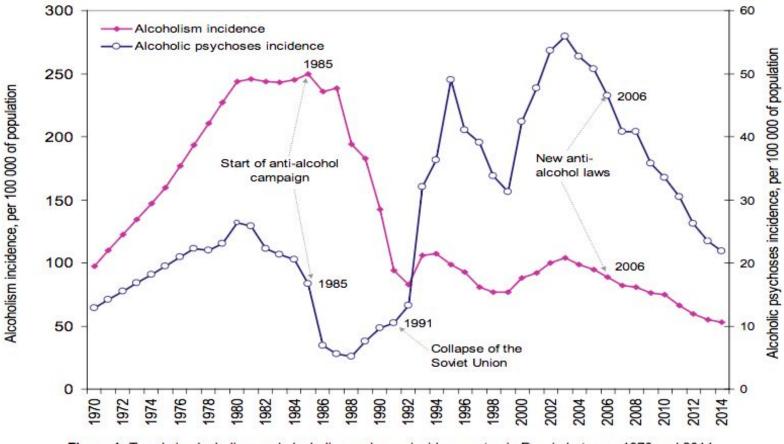


Figure 1: Trends in alcoholism and alcoholic psychoses incidence rates in Russia between 1970 and 2014.

Razvodovsky, 2014

# Estimates of recorded consumption (retail sales) of alcohol in the Russian Federation

In accordance with the Decree of the Government of the Russian Federation of December 30, 2005 No. 845

- Rosstat was the agency responsible for organizing the reporting of the volume of retail sales of alcoholic beverages.
- alcohol retailers were required to provide Rosstat with information on the total volume of retail sales of alcohol products for the purposes of comprehensive accounting
- At the same time, there is significant differences in Rosstat's alcohol sales figures, based on the comprehensive accounting of reports from the organizations licensed to retail alcohol sales, (in physical and financial terms, preliminary and final data). This shows significant difficulties in carrying out a solid record of retail sales of alcohol products, which Rosstat overcomes with the help of its analytical methods.

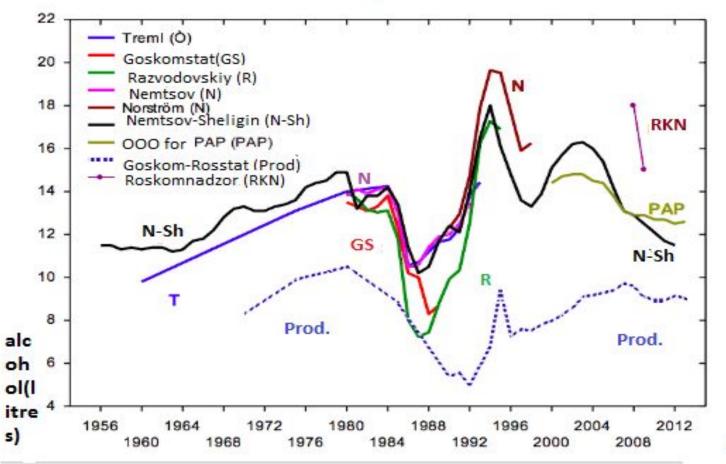
## Reform of 2017

- Since 2017, the indicators of retail sales of spirits and wine products are reported by Federal Service for Alcohol Market Regulation on the basis of data from the Unified State Automated Information System for Ethyl Alcohol, Alcohol and **Alcohol-Containing Products** (EGAIS).
- Retail sales of beer, cider, mead, low-content alcohol drinks are calculated by Rosstat according to the previously used methodology.



#### 2. Total alcohol consumption (registered + unregistered)

Estimates of alcohol consumption in Russia 1956-2012



Nemtsov 2015

### Mortality from certain alcohol-related causes

- accidental alcohol poisoning
- chronic alcoholism
- alcoholic psychosis
- alcoholic liver disease
- alcoholic cardiomyopathy
- degeneration of the nervous system caused by alcohol abuse
- chronic pancreatitis of alcohol ethology
- alcoholic polyneuropathy
- alcoholic myopathy
- alcoholic gastritis
- deliberate self-harm by alcohol poisoning
- alcohol poisonings with unspecified intentions
- fetal alcohol syndrome (dysmorphic)

## Indicators of alcohol poisoning

- Mortality from accidental alcohol poisoning (codes of the International Classification of Diseases 10 T51.0 X45), (Rosstat, preliminary and final data)
- Mortality from alcohol poisoning with undetermined intentions (codes of the International Classification of Diseases 10 T51.0 Y15) (only preliminary data are published) (Rosstat)
- The number of acute poisonings from alcohol-containing products of the population of the Russian Federation (with the specification of alcohol: ethyl, methyl, isopropyl, fusel oils, etc., total number and lethal) (Federal Service for the Oversight for Consumer Protection and Welfare)