Demographic challenges of the Russian Federation in connection to COVID-19 pandemics

Alexey Raksha, demographer December 3, 2020



How to compare COVID-19 death toll in different countries?

#	Country, Other IT	Total Cases 👫	New Cases 📭	Total Deaths 💵	New Deaths 📭	Total Recovered 📫	Active Cases 坑	Serious, Critical	Tot Cases/ 1M pop 👫	Deaths/ 1M pop ↓₹	Total Tests 🎵	Tests/ 1M pop 🕼	Population 11
1	<u>Belgium</u>	570,829	+3,297	16,339	+120	37,238	517,252	998	49,166	1,407	5,833,380	502,433	11,610,276
2	San Marino	1,554		44		1,252	258	10	45,760	1,296	16,611	489,134	33,960
3	<u>Peru</u>	958,324		35,839		888,815	33,670	974	28,902	1,081	5,019,608	151,384	33,158,162
4	<u>Andorra</u>	6,610		76		5,710	824	20	85,493	983	168,635	2,181,114	77,316
5	<u>Spain</u>	1,646,192		44,668		N/A	N/A	2,777	35,203	955	21,917,246	468,696	46,762,221
6	<u>ltaly</u>	1,538,217		53,677		696,647	787,893	3,782	25,457	888	21,411,701	354,350	60,425,227
7	<u>UK</u>	1,589,301		57,551		N/A	N/A	1,456	23,361	846	42,605,903	626,264	68,031,904
8	<u>Argentina</u>	1,407,277		38,216		1,235,257	133,804	4,120	31,021	842	3,830,421	84,436	45,364,803
9	<u>USA</u>	13,454,254		271,026		7,945,582	5,237,646	24,464	40,550	817	189,289,005	570,498	331,796,277
10	Mexico	1,090,675	+12,081	104,873	+631	803,581	182,221	3,335	8,423	810	2,825,030	21,818	129,484,128
11	<u>Brazil</u>	6,238,350		171,998		5,536,524	529,828	8,318	29,264	807	21,900,000	102,732	213,176,478
12	Chile	547,223		15,278		522,259	9,686	693	28,526	796	5,213,721	271,787	19,183,118
13	North Macedonia	59,701		1,658		36,825	21,218	138	28,656	796	325,959	156,460	2,083,339
14	<u>France</u>	2,196,119		51,914		159,915	1,984,290	3,883	33,614	795	20,326,038	311,116	65,332,770
15	Bosnia and Herzegovina	85,431		2,542		50,001	32,888		26,107	777	411,604	125,781	3,272,383
16	<u>Bolivia</u>	144,494	+104	8,943	+4	121,050	14,501	71	12,310	762	358,835	30,571	11,737,629
17	<u>Montenegro</u>	33,836		474		22,366	10,996	61	53,870	755	128,737	204,963	628,099
18	Ecuador	189,534		13,358		164,009	12,167	357	10,677	752	640,262	36,068	17,751,587
19	Czechia	515,984		7,967		432,587	75,430	839	48,146	743	3,021,311	281,914	10,717,135
20	Colombia	1,290,510		36,214		1,189,499	64,797	2,376	25,253	709	6,296,869	123,218	51,103,609

- Number of infected in official statistics depends on testing scale.
- The more tests conducted, the more light or asymptomatic cases are found.
- Mortality shoud be less dependent of testing.

Are we satisfied with COVID-19 official death toll count?

Video shows Italian army trucks transporting coffins from Italy's worst-hit city to remote cremation sites because morgues can't cope with more coronavirus deaths

Bill Bostock Mar 19, 2020, 2:07 PM





Ad closed by Google

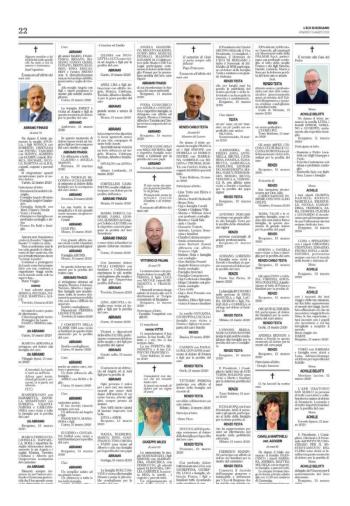
- Eyewitnesses evidence often do not correspond with severely grown overall death toll: only few hundreds officially died from COVID-19 in Bergamo by March, 19th

Coronavirus: Italian army called in as crematorium struggles to cope with deaths

At least 93 people have died after testing positive for coronavirus in the north Italian city.

By Emily Mee, news reporter

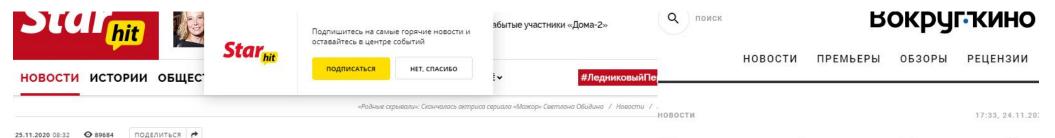
Too many obituaries: Bergamo, Italy



- According to Bergamo Mayor, COVID-19 has been diagnosed only for 91 died people among 400+ in one week (normal number is below 100).
- At the dawn of the Pandemic, testing facilities were severely unsufficient

According to the mayor's office, 400 people died in Bergamo and neighbouring towns last week - that's four times the number who died the same week the previous year - yet only 91 of them had tested positive for the virus.

Too many obituaries: Russia



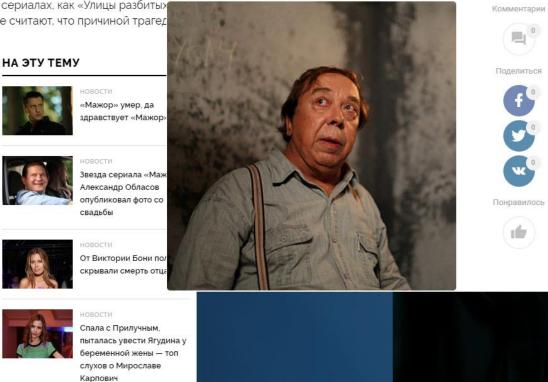
«Родные скрывали»: Скончалась актриса сериала _{Мюнхгаузен»} Владимир Фирсов «Мажор» Светлана Обидина

Неделю назад из жизни ушла актриса Светлана Обидина, сыгравшая в таких популярных сериалах, как «Улицы разбитых фонарей», «Мажор». Лишь вчера близкие артистки сообщили печальную новость. Родные считают, что причиной трагед мог стать коронавирус.

Светлана Обидина

Умер актер фильма «Тот самый

Артисту было 76 лет.

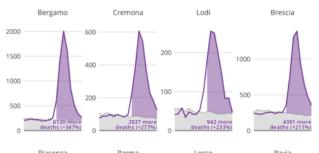


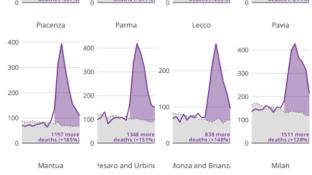
Excess mortality is the best indicator of COVID-19 pandemic severity

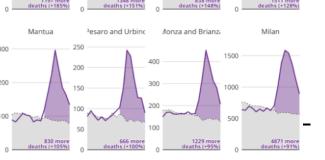
The New York Times

Regions in Italy with at least 25% more deaths than usual

Deaths per week 2020 compared to the average level in previous years





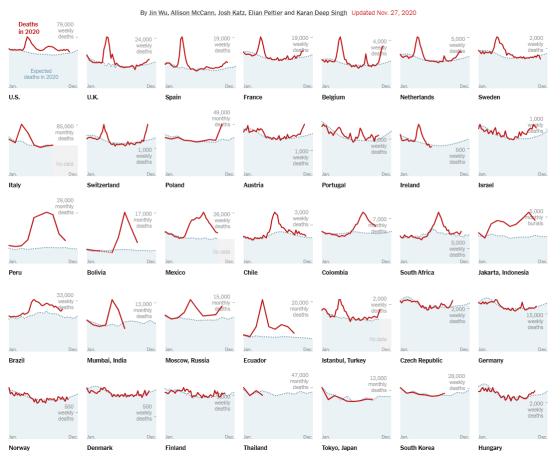


A common agreement among professionals emerged in April already on using excess death numbers without dividing by death cause over normal levels for particular time of year, divided by total population count or by normal death numbers:

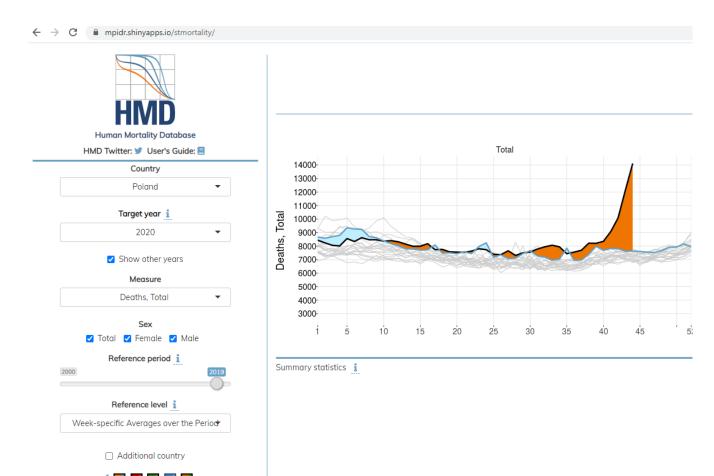
excess mortality.

Leading media use this data (NYT, FT)

412,000 Missing Deaths: Tracking the True Toll of the Coronavirus Outbreak



Excess mortality – the best indicator for evaluation the severity of COVID-19 pandemics



XLSX CSV Note Meta

FOR DEMOGRAPHIC RESEARCH

- Leading international mortality database – Human Mortality Database – created interactive dashboard on excess mortality. It's possible to change the normal mortality basis (for example, 2019, or 2015-2019, or even 2000-2019)

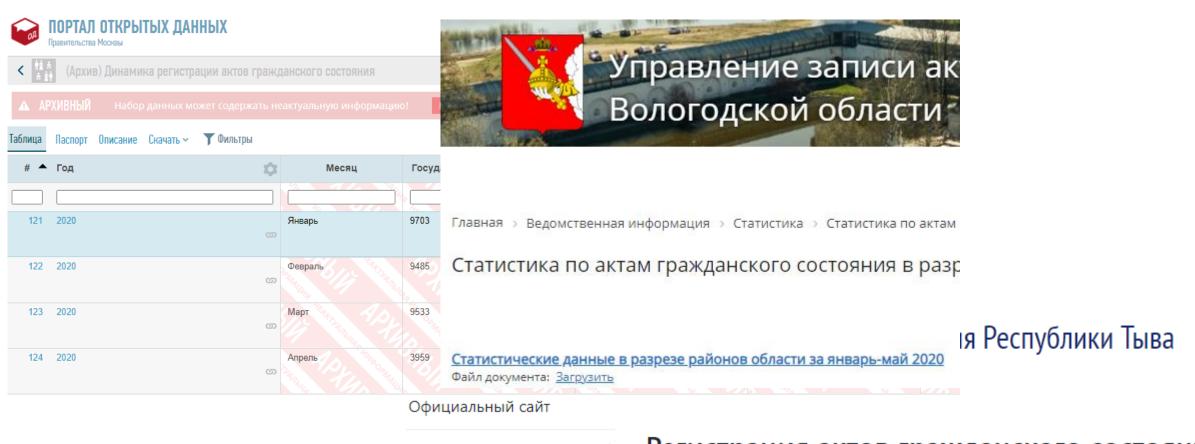
How deaths are handling and counted in Russia

- 1. Relatives of deceased must show up in civil registration office, already with medical post-mortem form(form N_0 106/y-08);
- 2. Civil registration office (ZAGS) count the death and input all the information from medical form, includinf information on death causes from all 5 fields into EGR ZAGS all-Russian database registry;
- 3. Previously large number of regional ZAGS published vital event counts on the monthly basis (40-45 out of 85);
- 4. ROSSTAT upload data from EGR ZAGS, check and publish information on its website 28-30 days after a month ends.

Problems with deaths registration in Russia

- 1. During lockdowns, many civil registration offices (ZAGSes) had changed their timetable significantly; many people hadn't come to register their relatives in time.
- 2. Many ZAGSes in regions stopped reporting death numbers.
- 3. Counting uncertainty with the determination of death causes, especially official main causes, ROSSTAT started to publish monthly data with delay;
- 4. ROSSTAT started sending semi-secret information on deaths from/with/because of COVID-19 and pneumonia death toll to the Government.

Many civil registration offices in Russian regions stopped reporting monthly deaths numbers



энная служба

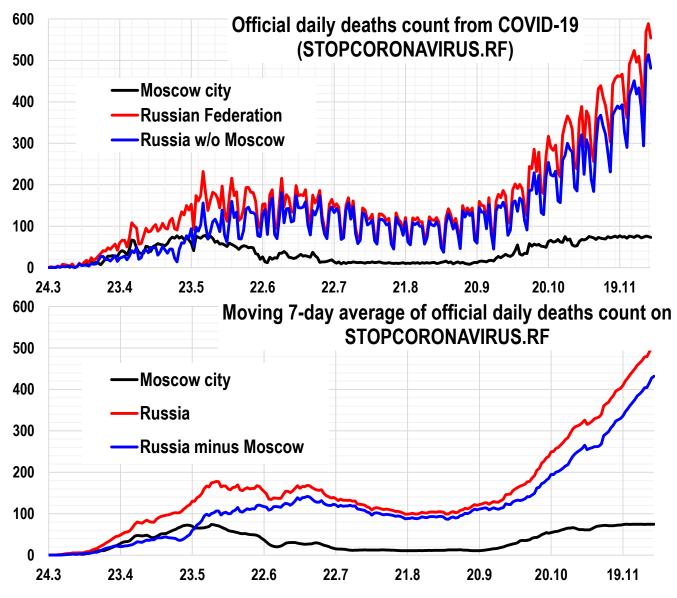
Регистрация актов гражданского состояния за 2020 год

Информация по АГС с января по апрель 2020г

Some regions, whose civil registration offices stopped publishing monthly data on deaths count during COVID-19 pandemics:

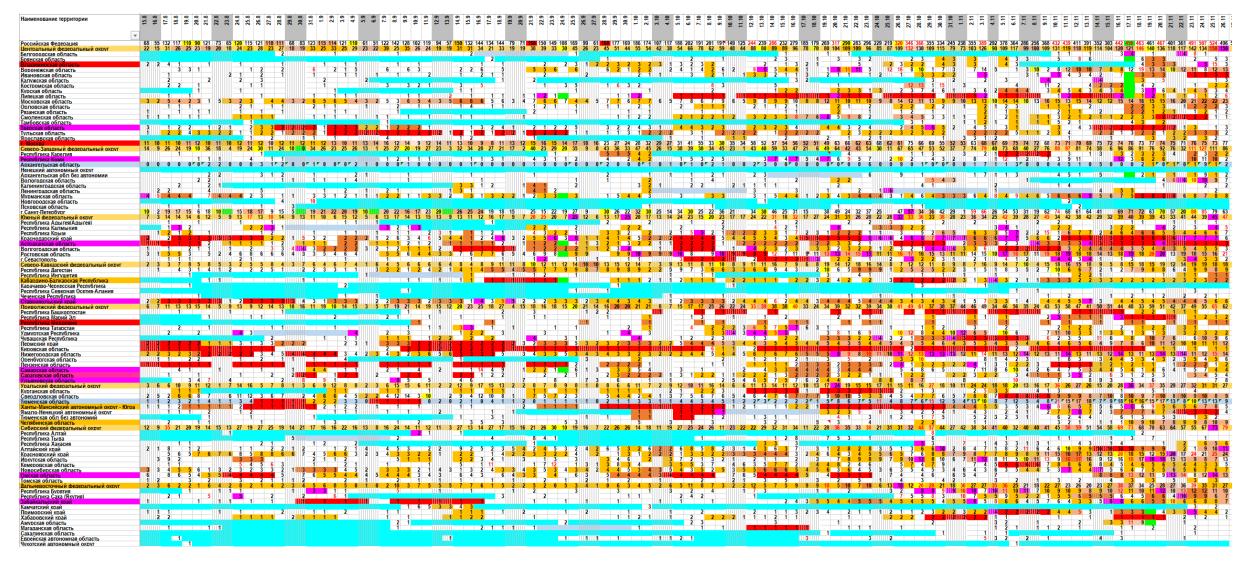
- Moscow city;
- Leningrad oblast;
- Ryazan oblast;
- Vologda oblast;
- Chelyabinsk oblast;
- Sverdlovsk (Yekaterinburg) oblast;
- Tyva Republic;
- Republic of North Ossetiya Alaniya;
- Crimea Republic;
- Kamchatka kray, etc.

Daily official death toll on the website STOPCORONAVIRUS.RF



- Overall dynamics for the whole of Russia looks trustful on graphs, but not for most regions (see next page)

Official daily death count by region on website "STOPCORONAVIRUS.RF"



- Often same numbers for many consequent days in many regions (painted **RED**)

ROSSTAT attempts to give more trustful numbers

СВЕДЕНИЯ О ЧИСЛЕ ЗАРЕГИСТРИРОВАННЫХ УМЕРШИХ С УСТАНОВЛЕННЫМ ДИАГНОЗОМ КОРОНАВИРУС ИНФЕКЦИИ за сентябрь 2020 года						
	Основная причина смерти	Причи	на смерти отне	сена к прочим		

	0	Основная причина смерти			Причина смерти отнесена к прочим важным состояниям			
		в том	числе:		в том числе:			
	Всего	COVID-19, вирус идентифицир ован	возможно, COVID-19, вирус не идентифицир ован	Bcero	существенно	СОVID-19 не является основной причиной смерти и не оказал существенно го влияния на развитие смертельных осложнений заболевания		
А	1	2	3	4	5	6		
Российская Федерация	5199	4329	870	4599	1401	3198		
Центральный федеральный округ	1610	1109	501	1565	607	958		
Белгородская область	10	10	0	44	8	36		
-	4.4	4.4	^	00	4	0.5		

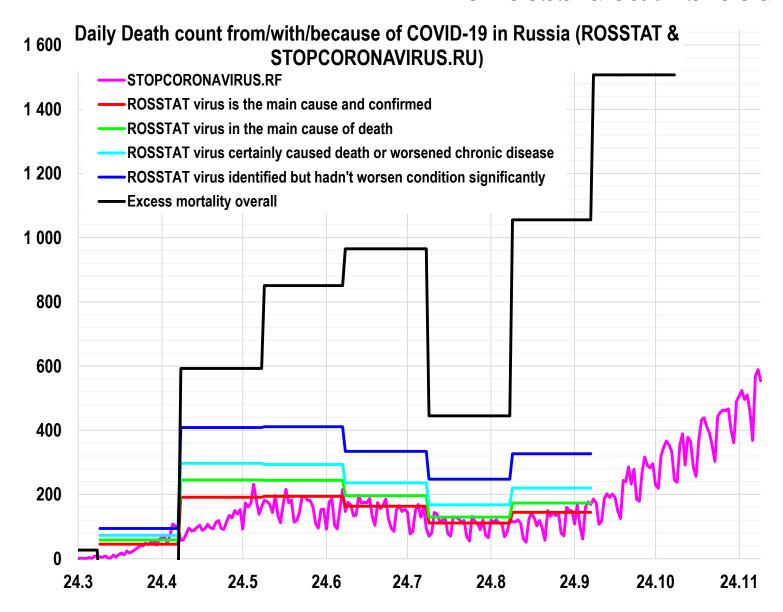
After me and others criticized **STOPCORONAVIRUS** .RF statistics, **ROSSTAT** started providing expanded statistics on deaths from/because of/with COVID-19 via 4 columns monthly, based of medical form № 106/y-08

Causes of death fields in the medic form № 106/y-08

<u>Приложение № 2</u>

10. Причины смерти:	Приблизительный период времени между началом патологического процесса и смертью	Оборотная сторона Код по МКБ-10
(болезнь или состояние, непосредственно приведшее к смерти) б)		
(патологическое состояние, которое привело к возникновению вышеуказанной причины) в) (первоначальная причина смерти указывается последней)		
 (внешняя причина при травмах и отравлениях) Прочие важные состояния, способствовавшие смерти, но не связанные с болезнью или патологическим состоянием, приведшим к ней, включая употребление алкоголя, наркотических средств, осихотропных и других токсических веществ, содержание их в крови, а также операции 		
(название, дата)		

Comparing official daily data on STOPCORONAVIRUS.RF with excess deaths count



- Multiplying official daily data on COVID deaths by 6,5-7 and moving it slightly back in time gives a very good match to overall excess deaths count, but only for Russia in a whole

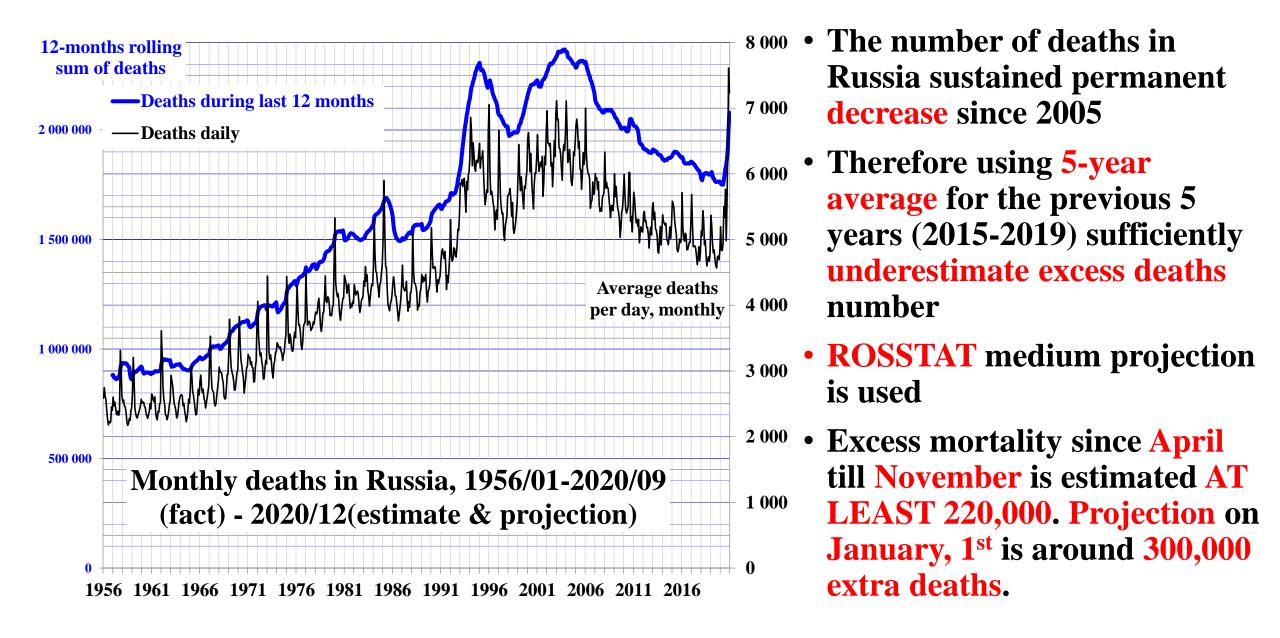
Comparing official COVID deaths count, excess deaths with searching engines' statistics of special COVID quieries



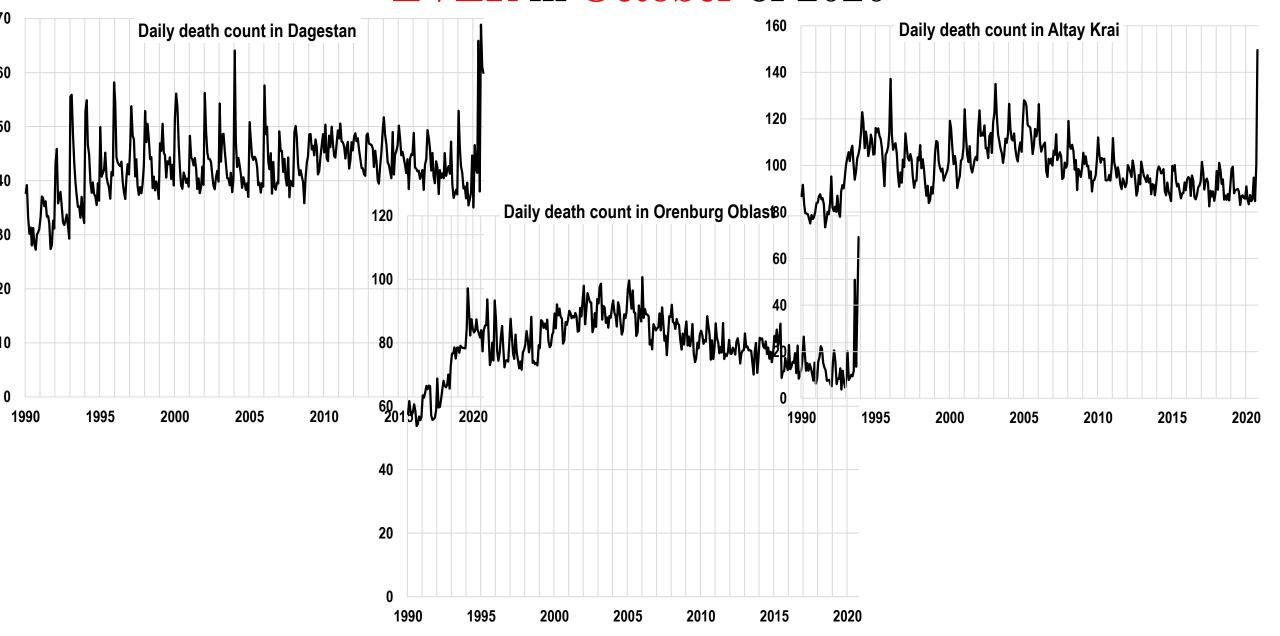
Interactive excess deaths Dashboard in Russian regions



How to evaluate normal deaths number?



At least 10 regions among 85 already saw record extra deaths EVER in October of 2020



Thank you for watching!

Alexey Raksha, demographer December 3, 2020 Ask your questions, please

