

Analytical overview of the poultry industry in Kazakhstan, Russia and Belarus

Agenda



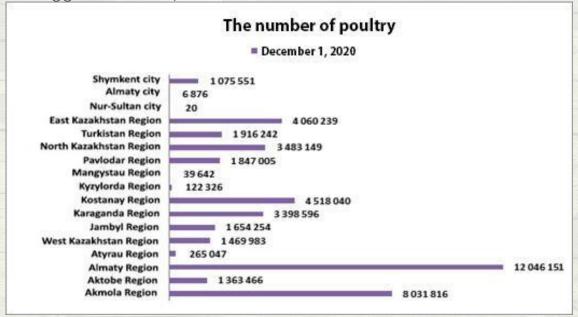


Kazakhstan

As of December 1, 2020, in comparison with an otherwise similar last year's date, the number of poultry decreased by 4.7% and amounted to 45.3 million heads in all categories of farms. About 66.1% of the number of poultry is concentrated in agricultural enterprises, 32.6% in household farms and 1.3% in peasant or farm enterprises and individual entrepreneurs.

	2019 year	2020 year	2020 у. in % by 2019г.
Poultry tha	t realized for th	e slaughtering	
- in live weight	250 837,1	264 231,4	105,3
- in slaughtering weight	199 534,7	211 791,1	106,1
Collected chicken eggs (pieces)	5 077 739,9	4 699 472,1	92,6
The number of poultry (heads)	47 521 044	45 298 403	95,3

In January–November 2020, slaughtering in farms or sale for slaughter of poultry in live weight amounted to 264 231 tons, in slaughter weight about 211 791 tons. The production of chicken eggs decreased by 7.4% and amounted to 4699.5 million pieces. Currently, there are 32 poultry farms of egg direction in Kazakhstan. Of which, 11 of poultry farms are with a small production volume (up to 100 million eggs), 16 of poultry farms are medium (about 100-200 million eggs) and 5 of poultry farms are large (from 200 million eggs and more).



Obtained poultry eggs (unit of measurement: thousand pieces)

	ē.			Including				
	All cat	egories of far	rms	Agricultural farming community	Individual entrepreneurs and farm holding	Individual farms		
9-	2020 year	2019 year	2020 y. in % by 2019 y.	2020 year	2020 year	2020 year		
Republic of Kazakhstan	4 699 472,1	5 077 739,9	92,6	3 507 364,0	25 166,3	1 166 941,8		
Akmola Region	747 580,7	793 099,0	94,3	660 632,5	1 075,7	85 872,5		
Aktobe Region	214 742,4	216 690,1	99,1	140 748,0	395,5	73 598,9		
Almaty Region	927 216,1	972 544,1	95,3	754 875,6	3 007,6	169 332,9		
Atyrau Region	52 713,9	110 646,0	47,6	51 146,3	139,1	1 428,5		
West Kazakhstan Region	173 692,3	167 926,9	103,4	134 315,6	1 357,5	38 019,2		
Jambyl Region	127 696,4	124 622,3	102,5	57 602,9	2 099,6	67 993,9		
Karaganda Region	607 645,6	682 131,2	89,1	551 099,3	10 583,0	45 963,3		
Kostanay Region	572 206,6	589 504,9	97,1	358 106,9	549,4	213 550,3		
Kyzylorda Region	6 885,6	7 840,2	87,8	1 429,0	44,8	5 411,8		
Mangystau Region	1 408,8	8 567,9	16,4	725	154,1	529,7		
Pavlodar Region	234 250,7	229 192,9	102,2	178 330,1	794,1	55 126,5		
North Kazakhstan Region	541 710,1	748 192,4	72,4	377 153,0	267,8	164 289,3		
Turkistan Region	200 992,3	173 889,5	115,6	75 519,5	3 247,2	122 225,6		
East Kazakhstan Region	144 331,5	142 033,1	101,6	24 483,1	1 450,9	118 397,5		
Nur-Sultan city	1,8	5,2	34,6	25	25	1,8		
Almaty city	319,8	337,4	94,8	1,6	=======================================	318,2		
Shymkent city	146 077,5	110 516,8	132,2	141 195,6	E .	4 881,9		

Realization of poultry eggs

		pieces			
		Realized		Industrial	The menteries
	through processing company	through a distribution network and a foodservice chain	for export	con sumption	The poultries that were processed for food targets
Republic of Kazakhstan	7 094,0	3 078 580,0	49 011,0	120 439,9	14 742,6
Akmola Region	S78	582 439,0	17 169,0	22 128,7	9 245,7
Aktobe Region	(4)	128 654,0	12	1 404,0	54:
Almaty Region	x	635 868,0	x	49 304,0	\$ 5 6
Atyrau Region	(4)	19 560,0	1#	3 826,0	5.46
West Kazakhstan Region	(52)	126 008,0	7 254,0	894,5	x
Jambyl Region	9 4 1	46 591,0	12	928	144
Karaganda Region	9.59	490 229,0	11 362,0	11 028,5	x
Kostanay Region	821	329 200,0	82	5 602,0	144
Kyzylorda Region	(**)	х	120	R e R	254
Mangystau Region	1923	х	極	issi .	0.54
Pavlodar Region	(55)	169 431,0	6 703,0	8 7 8	25
North Kazakhstan Region	578	332 725,0	x	8 008,3	19 7 4
Turkistan Region	1623	74 099,0	12	928	(4)
East Kazakhstan Region	x	1 328,0	15	17 974,0	
Shymkent city	925	140 294,0	8	269,9	929

One of the reasons for the decrease in poultry heads is Avian flu

In the world, highly pathogenic avian influenza affected the following countries in 2020: in Asia - China, India, Iraq, Israel, Kazakhstan, Philippines, Vietnam, Saudi Arabia and Taiwan; in Europe - Bulgaria, Czech Republic, Germany, Hungary, Poland, Romania, Russia, Slovenia, Ukraine, in Africa - Nigeria, South Africa, Egypt, as well as Australia and the USA.

Madiyar Akhmetov, representative of the Committee for Veterinary Control and Supervision of the Ministry of Agriculture of the Republic of Kazakhstan, noted that in eight regions of the Republic of Kazakhstan (Akmola, Zhambyl, Karaganda, East Kazakhstan region, Kostanay, Pavlodar, North Kazakhstan region and Almaty), about 26 687 heads were perished in individual farms and approximately 1 086 296 heads in poultry farms, such as: Bishkulskaya LLP, Agrointerptitsa LLP, Adel-Kus LLP, Alsad Kazakhstan LLP. Of course, this caused significant damage to the poultry industry in the regions, but these losses are not so significant on a republican scale, the mortality rate in the republic was only 2.3%.

In accordance with the plan of anti-epizootic measures for 2020, for preventive purposes, there were purchased 3,377,900 doses of avian influenza vaccine and \$ 2.4 million was allocated for vaccination.

To date, the reimbursement of the cost for 34,844 heads of deceased poultry stock and contact poultry of the owners of private household in the amount of 129 814 972 tenge and 246 177 heads - to legal entities in the amount of 240 064 519 tenge.

But speaking of monitoring the situation from the veterinary community, then we will have to mention here that since the farm owners are often not ready to admit the facts of infection of their poultry stock with Avian flu and may even go to conceal information about the death of the poultry stock, since poultry farming is a highly competitive industry.

As for the forecasts of the development or attenuation of seasonal epizootics, then, according to the representative of the Committee for Veterinary Control and Supervision of the Ministry of Agriculture of the Republic of Kazakhstan, there have always been influenza viruses and will be throughout the long history of coexistence of poultry, animals and humans. Their distribution directly depends on how safe the epidemic situation in the wild is in terms of morbidity. Outbreaks of highly pathogenic avian influenza can decrease only after the formation of herd immunity in wild fowl, and while the process of its formation takes place, the poultry stock will also be in a fever.



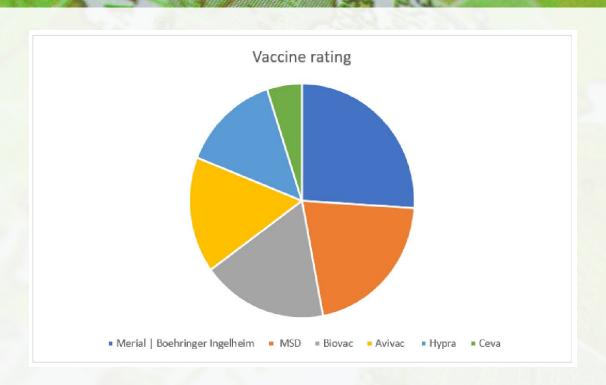
Increase in value of animal feed

The main headache in the poultry industry is the constant growth in the price of feed. The main headache in the poultry industry is the constant growth in the price of feed. Three or four years ago, feed grain were purchased at 40-42 thousand tenge / ton, but now it is impossible to find less than 82 thousand tenge / ton. Nevertheless, 70% of the cost of eggs and meat comes from feed. If in 2019 wheat cost was 46 thousand tenge per ton, now it costs more than 100 thousand tenge. The Maize cost increased by 1.5 times, prices for oil crops, especially soybean meal, grown three times from 90 to 270 thousand tenge. In this connection, to solve this problem, poultry farmers have been asking the Ministry of Agriculture to create a fodder fund.

Problems with the formation of breeding-stock

Recently, prices for chicken eggs and poultry meat are growing rapidly. One of the reasons is the problems with the formation of the breeding stock of poultry in the Kazakhstan. And in this connection, we have to import it. In addition, poultry farmers are forced to import equipment, vitamins, and special feed necessary for enterprises from abroad. It can be said that there is nothing else for poultry farming in Kazakhstan except fodder grain and grass.

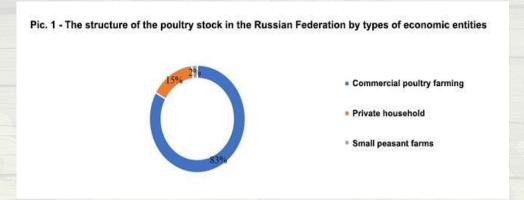
Vaccine rating





Russia

As of the end of September 2020, the number of poultry in agricultural organizations increased by 0.1%, amounted to 561 million heads. In January-September 2020, estimates that 34.2 billion eggs were produced in farms of all categories. Commercial poultry farming accounts for 83% of the total poultry stock, 15% for private household, and the remaining 2% for small peasant farmsBroilers and layers accounted for 96% of the country's poultry stock.

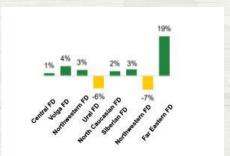


As of October 2020, the level of self-sufficiency in this type of meat in Russia was close to 100%, although this market has not shown significant growth over the past five years. Stagnation is associated with the achieved level of self-sufficiency in the domestic market. The threshold value about 85% of the proportion of domestic products for poultry meat in the domestic market was reached in 2011, and for today it is almost 100%; regarding to egg, the domestic requirements have always been fully satisfied by domestic producers.

Poultry meat production in agricultural enterprises, slaughter weight, in thousand tons, in September 2020

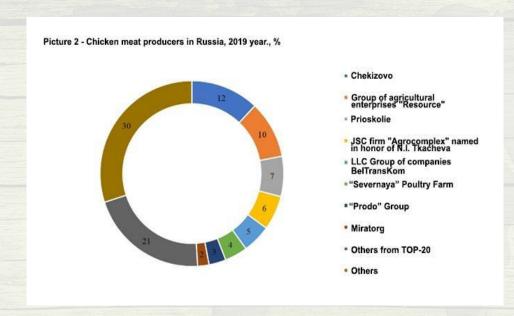
• Growth in poultry meat production in September 2020 amounted to + 1%. The largest increase in absolute value was shown by the Kursk region (+17 thousand tons) and the Republic of Bashkortostan (+16 thousand tons). The largest decline in production was in the Chelyabinsk (-23 thousand tons) and Rostov regions (-12 thousand tons).

Dynamics of production by federal district, September 2020 year





In 2019, the 20 largest Russian companies in this industry produced a total of 4,383 million tonnes (in live weight), or 70.5% of the total volume of broiler meat production in the country. According to experts, the market share of the TOP-20 companies in the industry will continue to increase as in 2021 year.



	type of business	Name of poultry farm
1	ZAO	Priskolie
2	OAO	"Severnaya" Poultry Farm
3	000	"Novo-Ezdonovskaya" Poultry Farm
4	ZAO	"Roskar" Poultry Farm
5	ZAO	Uralbroiler
6	0A0	Agricultural Joint Stock Company "Belorechenskoe"
7	0A0	"Oktyabrinskaya" Agrofirm
8	ZAO	JSC "Poultry farm Sinyavinskaya"
9	OAO	Agrofirm "Poultry farm Seimovskaya"
10	OAO	"Borovskaya" Poultry Farm



Poultry meat exports are growing rapidly (+ 59%).

For the past eight years, the export of poultry meat from Russia have seen a steady growth. Exports in July 2020 exceed index of the 2019 year by 50% in volume terms and by 32% in value terms. The main reason for the increasing export is access to the market of China that was opened in 2019. The main export products for China (excluding paws) is wings, accounting for 76% of shipments in July. Half of the supplies to Ukraine are 65% of chickens. Turkey-hen is supplied mainly to China (52% of shipments), Ukraine (20%), Congo (8%) and Liberia (8%). Similar recipient countries in categories of the backs, necks and rump - Liberia (26%), Congo (37%), Ukraine (22%) and China (10%). The development of the export direction can be seen on the example of the Cherkizovo Group. In 2019, this company shipped 14 thousand tons of chicken to the China, which is more than 40% of the total export volume of Cherkizovo of this product category.



Avian flu in Russia

In 2020, Highly pathogenic avian influenza in the Russian Federation also loudly declared itself: 85 outbreaks of avian flu were registered, more than 2 million heads were destruction in 10 subjects of the Russian Federation, that is: Omsk region - 44 outbreaks (more than 1.5 million heads), Tyumen region - 15 outbreaks (more than 1 thousand heads), Kurgan region - 13 outbreaks (more than 2.6 thousand heads), Chelyabinsk region - 4 outbreaks (less than 1 thousand heads), Karachay-Cherkessia Republic - 1 outbreak (more than 170 thousand heads), the Republic of Tatarstan - 3 outbreaks (more than 6.7 thousand heads), Kostroma region - 1 outbreak (more than 14 thousand heads), Rostov region - 1 outbreak (more than 1 million heads).

All samples identified material from the avian influenza virus subtype H5N8. Consequently, poultry count was carried out in these settlements. Quarantine has been established on the territory of disadvantaged settlements located near these lakes, epizootic foci and troublesome zone have been identified. In disadvantaged areas, are carried out the activities in accordance

with the rules for the fight against avian influenza.

TRIOVAC Multi

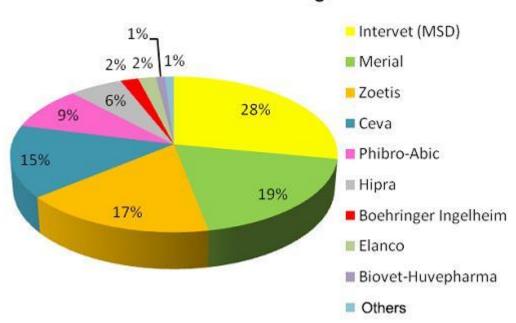
For information, at this moment in Federal Center for Animal Health (FGBI "ARRIAH") work on new vaccines for the prevention of infectious diseases of agricultural poultry is being completed. A registration dossier is being prepared for a trivalent vaccine against Newcastle disease, avian infectious bronchitis (multi) and egg drop syndrome-76 "TRIOVAC Multi". It contains a multi-strain component of the infectious bronchitis virus containing several serotypes of this virus: Massachusetts, 793 / B and QX. "The development of new drugs is associated with the changing epizootic situation for infectious bronchitis of chickens (IBV) and Newcastle disease (ND) in the industrial poultry industry of the country due to the fact that existing vaccines are often ineffective against new antigenic variants such as - IB virus and highly virulent ND viruses," - said Sergey Frolov, leading researcher of the FGBI "ARRIAH". At the same time, the price of the ARRIAH vaccine is at least two times cheaper than vaccines from foreign manufacturers.





Vaccine rating

Vaccine rating



Name of vaccine	2019 year, doses	+/- million doses by 2018 year +0,64	
Nobilis IB 4/91 live vaccine against avian infectious bronchitis	1,99 billion		
Avinew live vaccine against Newcastle disease	1,46 billion	+0,55	
Poulvac IB primer live vaccine against avian infectious bronchitis	1,17 billion	+0,31	
Tabik MB live vaccine against bursal disease of chickens MB strain (Gumboro)	1,09 billion	+0,54	
Poulvac ND live vaccine Poulvac against Newcastle disease strain La Sota type B1	0,863 billion	+0,55	
Bioral H120 live vaccine against avian infectious bronchitis	0,852 billion	+0,52	
Nobilis ND C2 live vaccine against Newcastle disease	0,833 billion	-0,07	
Nobilis IB MA5 live vaccine against avian infectious bronchitis	0,63 billion	-0,03	
Poulvac Brusa F live vaccine against bursal disease of chickens	0,55 billion	+0,28	
Nobilis Gumboro 228E live vaccine against bursal disease of chickens	0,499 billion	-0,32	



Belarus

Belarus has been a traditional agricultural leader since the days of the Soviet Union, and since 2000, the agricultural and livestock industry has continued to develop under the active support of the government. Currently, it has not only established itself as an agricultural and livestock export country but is also a leading group in the global agricultural products market. As of 2019, the agricultural and livestock industry accounted for 6.8% of Belarus's total GDP. Domestically and externally, the agriculture and livestock industry is known as the core industry of Belarus, and its importance can be easily identified by looking at its share of GDP. Belarus's agricultural and livestock industry is a remnant of the former Soviet Union, and so far, government-affiliated farms (farms owned by the government entirely or partially owned by the government) are much larger and accounted for a larger proportion of farms than private companies.

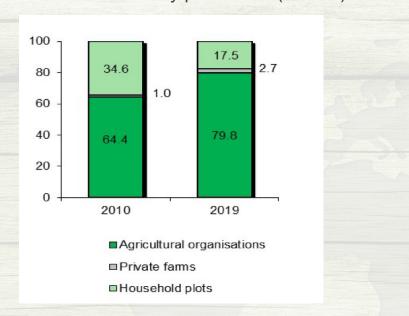
The number of farms in Belarus from 2010 to 2019

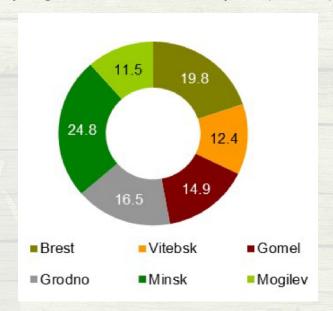
Years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Government-	1,644	1,613	1,564	1,530	1,497	1,454	1,469	1,509	1,357	1,389
affiliated										
farm										
Private	2,001	2,118	2,337	2,436	2,475	2,482	2,500	2,578	2,652	2,700
enterprise										
farm										

자료: 벨라루스 통계청

2010~2019 Volume change of Belarusian agricultural and livestock industry production (unit: %)

Share of agricultural and livestock production by region in Belarus, 2019 year (unit: %)





Looking at the fluctuations in livestock production, after the collapse of the former Soviet Union, production decreased throughout livestock production until 2000, but gradually recovered since 2010 and production has been a steady increase. Today, Belarus is the world's fourth largest dairy exporter.

Changes in major livestock production in Belarus

Years	Livestock (before slaughter)	Meat (after slaughter)	Milk	Eggs	Wool
Unit	Thousand tons	Thousand tons	Thousand tons	Million psc	tons
1985	1,534	1,032	6,759	3,363	958
1990	1,758	1,181	7,457	3,657	958
2000	854	598	4,490	3,288	184
2011	1,464	1,020	6,500	3,656	86
2012	1,557	1,092	6,766	3,778	96
2013	1,669	1,172	6,633	3,850	96
2014	1,548	1,073	6,703	3,858	112
2015	1,661	1,149	7,047	3,746	131
2016	1,678	1,172	7,140	3,615	142
2017	1,676	1,208	7,322	3,559	138
2018	1,729	1,226	7,345	23,363	121
2019	1,725	1,240	7,394	3,514	n/a

Belarus is rich in livestock and exports meat and dairy products to more than 50 countries. As the world's top 10 meat exporters, it is the 7th largest export of beef and 9th largest export of poultry, 3rd largest export of butter, 4th largest export of cheese, and 5th largest export of dry skim milk. Meat and dairy products account for 60% of Belarusian food exports. Over the past 10 years, the proportion of livestock heads owned by government-affiliated farms has been gradually increasing and the number of livestock owned by individual farms have a sharp decline.

The number of animal heads as of the end of the year in Belarus

(Unit: thousand heads, poultry in million heads)

Category	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cattles	4,151	4,247	4,367	4,322	4,364	4,356	4,298	4,361	4,340	4,295
(Including	1,478	1,477	1,519	1,525	1,533	1,512	1,502	1,500	1,498	1,495
female/dairy			100.07		8800				200	5500
cattle)										
Pigs	3,887	3,989	4,243	3,267	2,925	3,205	3,145	3,156	2,841	2,882
Sheep/goat	124	125	133	131	141	153	158	155	151	149
Horse	113	100	92	82	73	64	55	49	43	38
Poultry	37.5	39.9	42.4	45.7	48.2	48.5	49.5	50.7	51.2	53

Export and import

- The proportion of agricultural and livestock products and processed foods in Belarus's foreign trade is relatively high. The proportion of exports from Belarus was 16.6% as of 2019, which was 10.0% in 2011, up 6.6% points. Meanwhile, the share of agricultural and livestock products and processed foods in category of import was 11.6% as of 2019, up 4.4 percentage points from 2011.
- On the other hand, more than 80% of external exports are exported to Russia, and since the Belarusian agriculture and agriculture industry is highly dependent on Russia, it has a structure that is quite vulnerable to changes in the Russian government's import policy on agricultural and livestock products and food.

Share of agricultural and livestock products and processed foods in foreign trade in Belarus from 2011 to 2019 years. (unit: %)

Years	2011	2012	2013	2014	2015	2016	2017	2018	2019
External	10	11	15.5	15.5	16.7	18	17	15.4	16.6
export									
External	7.2	8 11.4	9.7	12	14.7	14.8	13.4	11.4	11.6
income		11.6							

Animal Vaccines that imported to Belarus (HS Code 300230) Import Status by Country (Unit: USD, %)

Products: 300230 (Vaccines For Veterinary Medicine)

Classify		2019			2020.1-5				
No.	Country	Price	Share	Percentage	Country	Price	Share	Percentage	
	name			change	name			change	
	World	40,117,000	100	-1.21	World	13,679,700	100	1.83	
1	Russia	13,568,800	33.82	5.95	Russia	4,234,100	30.95	-17.15	
2	Netherlands	11,106,300	27.68	47.16	Netherlands	3,585,300	26.21	-9.2	
3	United	7,569,600	18.87	-43.11	United	3,220,600	23.54	88.68	
	States				States	Value of the second		65	
4	Hungary	2,648,300	6.6	20.1	Hungary	960,100	7.02	-6.6	
5	Spain	1,189,200	2.96	48.35	Spain	232,600	1.7	-52.32	
6	Germany	825,500	2.06	44.95	Germany	384,400	2.81	51.64	
7	Czech	605,300	1.51	-41.07	Czech	226,300	1.65	39	
	Republic				Republic				
8	Slovakia	587,900	1.47	2.62	Slovakia	74,800	0.55	-66.74	
9	Mexico	441,600	1.1	-26.44	Italy	246,700	1.8	_	
10	France	416,500	1.04	930.94	France	299,200	2.19	434.29	

자료원 : Global Trade Atlas, 벨라루스 통계청자료원 : Global Trade Atlas, 벨라루스 통계청

Veterinary preparations and products that imported to Belarus (HS code 300390) Import status by country (Unit: USD, %)
Products: 300390 (Medicaments (Excluding Vaccines, Bandages And Pharmaceutical Goods) Nesoi, Of Two Or More Mixed Constituents, Not In Measured Doses, Etc.)

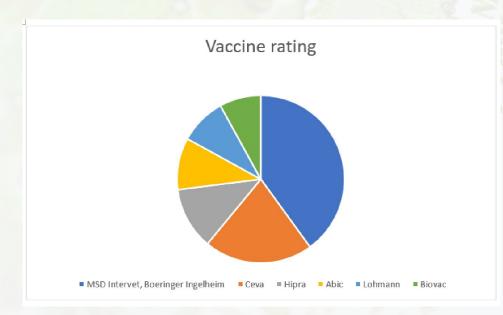
Classify		2019	9			2020.	1-5	
No.	Country	Price	Share	Percentage	Country	Price	Share	Percentage
	name			change	name			change
	World	25,225,800	100	15.9	World	11,764,600	100	51.33
1	Russia	13,187,200	52.28	14.46	Russia	7,349,400	62.47	153.74
2	India	11,301,900	44.8	23.86	India	4,261,300	36.22	-6.24
3	China	367,100	1.46	-16.13	China	132,300	1.12	63.94
4	Algeria	159,800	0.63	-67.06	,	=		
5	Ukraine	142,100	0.56	65.81	Ukraine	19,500	0.17	-78.24
6	Belgium	50,300	0.2	-34.33	Belgium	2,100	0.02	-
7	Germany	14,600	0.06	-5.81	=			
8	Italy	2,800	0.01	-	-			

자료원: Global Trade Atlas, 벨라루스 통계청

Animal Preparations Containing Vitamins (HS Code 300450) Status of Imports by Country (Unit: USD, %) Products: 300450 (Medicaments, In Measured Doses, Etc., Containing Natural Or Synthetic Vitamins And Their Derivatives)

Classify		201	9			2020.1	-11	
No.	Country name	Price	Share	Percentage change	Country name	Price	Share	Percentage change
	World	29,715,400	100.00	-5.42	World	31,899,500	100.00	21.63
1	Germany	8,318,800	27.99	8.76	Germany	7,859,700	24.64	9.23
2	Russia	4,884,900	16.44	21.05	United Arab Emirates	4,307,500	13.50	300.77
3	Poland	2,593,700	8.73	18.24	Russia	3,503,900	10.98	-25.59
4	Slovenia	2,036,100	6.85	27.53	Poland	3,419,000	10.72	42.53
5	Hungary	1,714,800	5.77	-48.50	Slovenia	2,081,200	6.52	25.90
6	Egypt	1,477,000	4.97	-30.13	Hungary	1,615,300	5.06	1.43
7	United Arab Emirates	1,289,500	4.34	89.63	France	1,168,800	3.66	56.74
8	Bulgaria	1,279,700	4.31	-25.27	Indonesia	1,063,300	3.33	-
9	Finland	1,077,300	3.63	-21.57	Bulgaria	1,063,100	3.33	-4.89
10	Ukraine	1,074,600	3.62	28.13	Finland	914,100	2.87	-1.91
	Korea, South				Korea, South			
	(26 위)	35,500	0.12	512.07	(25 위)	40,400	0.13	13.80

Vaccine rating



The main leader in vaccines is MSD Intervet, Boehringer Ingelheim. The rest of the niche is filled by the following companies: Ceva, Hipra. Abic, Lohmann, Biovac. The epizootic situation in the country is considered conditionally favorable. In their work, veterinarians use standard vaccine strains:

- 1) Newcastle La Sota. Clone 30, VG / GA, C-2
- 2) Infectious bronchitis H-120, IB 4-91, IB-88, D-274
- 3) Gumboro E-228, Waxitec HVT + IBD



Thank you