

**Commercial Embryo Transfer Activity  
in Europe 2020**

Collated by Helene Quinton

## National data collectors

<b>Country</b>	<b>Collector</b>	<b>Comment</b>
<b>Austria</b>	Friedrich FÜHRER	
<b>Belarus</b>	Victor MADISON ; A. DESHKO	
<b>Belgium (South)</b>	Isabelle DONNAY	
<b>Belgium (Flanders)</b>	Peter VERCAUTEREN	No data for two years
<b>Bosnia Herzegovina</b>	Teodor MARCOVIC	No data for two years
<b>Croatia</b>	Mario MATKOVIC	No data for two years
<b>Denmark</b>	Henrik CALLESEN	
<b>Estonia</b>	Ants KAVAK	
<b>Finland</b>	Seija VAHTIALA	
<b>France</b>	Serge LACAZE	
<b>Germany</b>	Hubert CRAMER	
<b>Greece</b>	Foteini SAMARTZI	
<b>Hungary</b>	Szabolcs SIMAI	
<b>Ireland</b>	Patrick LONERGAN	No data this year
<b>Israel</b>	Amir SHIFMAN	No data this year
<b>Italy</b>	Giovanna LAZZARI	
<b>Latvia</b>	Ilga SEMATOVICA	
<b>Lithuania</b>	Rasa NAINIENE	
<b>Macedonia</b>	Toni DOVENSKI	No data for two years
<b>Norway</b>	Marja MIKKOLA	
<b>Poland</b>	Jedrzej JASKOWSKI	No data for two years
<b>Portugal</b>	Joao Nestor CHAGAS E SILVA	
<b>Romania</b>	Stefan CIORNEI	
<b>Russian Federation</b>	Victor MADISON ; Denis KNUROW	
<b>Serbia</b>	Aleksandar MILOVANOVIC	
<b>Slovakia</b>	Dalibor POLAK	
<b>Slovenia</b>	Aleksandar PLAVSIC ; Janko MRKUN	
<b>Spain</b>	Daniel MARTINEZ BELLO	
<b>Sweden</b>	Renee BÅGE	
<b>Switzerland</b>	Rainer SANER	
<b>The Netherlands</b>	Anna BEKER VAN WOUNDENBERG; Erik MULLART	
<b>Turkey</b>	Ebru EMSEN;Fatih DEMIRASLAN	No data for two years
<b>Ukraine</b>	Victor MADISON	No data this year
<b>United Kingdom</b>	Brian GRAHAM	No data for two years

## Declared bovine *In vivo* embryo production

Country	Dairy				Beef				All		
	Collections	% Coll. with sexed semen	Embryos & ova	Transferable embryos	Collections	% Coll. with sexed semen	Embryos & ova	Transferable embryos	Collections total	Transferable embryos total	Embryos/collection
Austria	522	4%	4 032	3 537	9	0%	123	63	531	3 600	6,8
Belarus	334	26%	1924	1069	35	0%	176	139	369	1 208	3,3
Belgium	58	0%	434	291	731	0	5155	3 365	789	3 656	4,6
Denmark	794	0%	7 072	5 050	47	0%	677	505	841	5 555	6,6
Estonia					3	0%	32	31	3	31	10,3
Finland	433	8%	4 156	2 951	2	0%	28	20	435	2 971	6,8
France	5121	20%	49372	30332	1021	0,1263	13271	7 173	6142	37 505	6,1
Germany	3143	0%	30 800	21 411	459	0	5095	3 230	3602	24 641	6,8
Greece	12	0%	30	10	0		0	0	12	10	0,8
Hungary	346	0%	1 651	565	61	0%	402	347	407	912	2,2
Italy	2445	54%	25183	17359	131	0,084	1283	890	2576	18 249	7,1
Latvia	4	0%	18	15	0		0	0	4	15	3,8
Lithuania	4	0%	21	16	0		0	0	4	16	4,0
Netherlands	2246	3%	16 708	12 512	0		0	0	2246	12 512	5,6
Norway	223	2%	1 629	1249	5	0%	37	27	228	1276	5,6
Portugal	114	77%	112	536	5	0%	28	18	119	554	4,7
Romania	4	0%	21	21	0		0	0	4	21	5,3
Russian Federation	611	72%	7619	3155	410	0,0293	4041	2 968	1021	6 123	6,0
Serbia	7	0%	29	25	0		0	0	7	25	3,6
Slovenia	28	57%	179	131	5	20%	45	27	33	158	4,8
Spain	169	59%	1674	945	116	12%	1583	1 232	285	2 177	7,6
Sweden	91	14%	683	416	0		0	0	91	416	4,6
Switzerland	687	43%	4 996	4 860	0		0	0	687	4 860	7,1
<b>Total</b>	<b>17 396</b>	<b>20%</b>	<b>158 343</b>	<b>106 456</b>	<b>3 040</b>	<b>5%</b>	<b>31 976</b>	<b>20 035</b>	<b>20 436</b>	<b>126 491</b>	<b>6,2</b>

### Declared bovine *In vitro* embryo production (OPU-IVP)

Country	Dairy				Beef				All		
	OPU	% OPU with sexed semen	Oocytes	Embryos	OPU	% OPU with sexed semen	Oocytes	Embryos	OPU	Embryos	Embryos /OPU
Finland	625	1%	5 697	1 569					625	1 569	2,5
France	725	6%	6 836	1962	63	0%	1 000	461	788	2 423	3,1
Germany	2 276	0%	31 858	6 487	219	0	3420	687	2 495	7 174	2,9
Italy	112	64%	1 169	331	70	0%	715	147	182	478	2,6
Netherlands	5 495	2%	58 691	12 657					5 495	12 657	2,3
Norway	137	0%	1062	297					137	297	2,2
Serbia	24	38%	115	32					24	32	1,3
Spain	75	67%	1 140	353	85	27%	898	423	160	776	4,9
Switzerland	83	35%	928	306	1	0%	19	5	84	311	3,7
<b>Total</b>	<b>9 552</b>	<b>3%</b>	<b>107 496</b>	<b>23 994</b>	<b>438</b>	<b>3%</b>	<b>6 052</b>	<b>1 723</b>	<b>9 990</b>	<b>25 717</b>	<b>2,6</b>

### Declared bovine *In vitro* embryo production – abattoir

Country	Dairy			Beef		
	Donors	Oocytes	Embryos	Donors	Oocytes	Embryos
Greece	297	1 442	227			
Netherlands	0	5 181	656	0	0	0
Portugal	0	50	20	0	6 213	517
Romania	17	127	8	0	0	0
Serbia	0	0	0	5	53	12
Spain	64	1 944	894	15	6 219	3 018

### Declared bovine embryo technologies – embryo genotyping

Country	Sexed embryos		Genotyped embryos	
	In Vivo	In Vitro	In Vivo	In Vitro
France	1 599	0	1 455	0
Germany	5 450	14	8	0
Netherlands	0	0	0	4 371
Spain	0	23	0	12
<b>Total</b>	<b>7 049</b>	<b>37</b>	<b>1 463</b>	<b>4 383</b>

## Declared bovine embryo transfers and exports– *In vivo*

Country	Dairy				Beef				Total embryos transferred
	Fresh embryos transferred	Frozen embryos			Fresh embryos transferred	Frozen embryos			
		Domestic transferred	Foreign transferred	Exported		Domestic transferred	Foreign transferred	Exported	
Austria	1 469	803	564	41	10	0	30	40	2 876
Belarus	876	493	383	0	100	82	18	0	1 952
Belgium	31	99	20	9	519	2437	39	13	3 145
Denmark	2942	1 414	0	0	294	141	0	0	4 791
Finland	680	1 600	179	524	0	0	0	0	2 459
France	14241	11833	1048	261	1779	3656	119	240	32 676
Germany	9293	11945	0	95	924	1784	0	8	23 946
Hungary	485	269	98	0	14	75	116	0	1 057
Italy	7300	1912	0	0	0	0	0	0	9 212
Latvia	8	1	0	0	0	0	0	0	9
Netherlands	386	763	20	0	0	0	0	0	1 169
Norway	0	1093	7	0	0	11	31	0	1 142
Portugal	144	354	7	0	3	26	62	0	596
Romania	8	0	0	0	0	0	14	0	22
Russian Federation	1170	1368	57	0	128	174	0	0	2 897
Serbia	15	0	0	0	0	0	80	0	95
Slovenia	75	20	6	0	17	6	12	0	136
Spain	298	410	81	0	139	310	2	152	1 240
Sweden	220	1160	0	0	0	0	0	0	1 380
Switzerland	794	1217	0	48	0	0	0	0	2 011
<b>Grand Total</b>	<b>40 435</b>	<b>36 754</b>	<b>2 470</b>	<b>978</b>	<b>3 927</b>	<b>8 702</b>	<b>523</b>	<b>453</b>	<b>92 811</b>

## Declared bovine embryo transfers and exports – *In vitro*

Country	OPU				Abattoir		Total embryos transferred
	Fresh embryos transferred	Domestic frozen embryos transferred	Foreign frozen embryos transferred	Embryos exported	Fresh embryos transferred	Domestic frozen embryos transferred	
Belgium	0	97	2	0	0	0	99
Finland	0	715	0	320	0	0	1 035
France	1 006	695	109	99	0	0	1 909
Germany	3 290	5 040	0	0	0	0	8 330
Italy	280	51	0	0	0	37	368
Netherlands	3 762	3 455	51	0	0	0	7 268
Norway	0	198	0	0	0	0	198
Portugal	0	0	19	0	20	0	39
Serbia	0	18	0	0	0	5	23
Spain	279	173	30	0	16	19	517
<b>Grand total</b>	<b>8 617</b>	<b>10 442</b>	<b>211</b>	<b>419</b>	<b>36</b>	<b>61</b>	<b>19 786</b>

### Declared embryo production, transfer and export in other species – *In vivo*

Species	Country	Embryo collection		Embryo transfer			
		Collections	Viable embryos	Fresh embryos	Frozen domestic	Frozen foreign	Exported embryos
Sheep	Portugal	0	0	0	8	0	0
	Romania	4	27	27	0	0	27
	Russian Federation	0	0	0	0	2 683	0
	Serbia	0	0	12	0	0	12
	Spain	3	35	15	0	0	15
	Sweden	0	0	0	0	285	0
	<b>Total</b>	<b>7</b>	<b>62</b>	<b>54</b>	<b>8</b>	<b>2 968</b>	<b>54</b>
Goat	Spain	17	319	32	12	0	0
Horse	France	4 437*	2 219*	2 219*	0	0	0
	Russian Federation	4	3	3	0	0	0
	Spain	2	2	2	0	0	0
	Sweden	29	24	24	0	0	0
	<b>Total</b>	<b>4 472</b>	<b>2 248</b>	<b>2 248</b>	<b>0</b>	<b>0</b>	<b>0</b>

\*Estimate from the number of officially declared pregnancies

### Declared embryo production, transfer and export in other species – *In vitro*

Species	Country	Oocyte collection			IVP embryo transfer			Exported embryos
		OPU	Oocytes	Embryos	Fresh embryos	Frozen domestic	Frozen foreign	
Water Buffalo	Italy	5	216	70	0	8	0	0
Horse	Italy	2 825	28 614	5 345	25	527	0	2 689
	France	0	0	0	0	0	23	0
	Switzerland	41	254	14	0	0	0	0
	<b>Total</b>	<b>2 866</b>	<b>28 868</b>	<b>5 359</b>	<b>25</b>	<b>527</b>	<b>23</b>	<b>2 689</b>