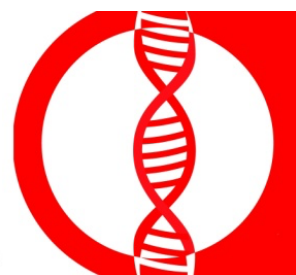


**Research Group for
Biological Arms Control**



2020 Reader on Publicly Available CBMs

November 2020

About this Reader

The exchange of information under the Biological Weapons Convention (BWC) in the form of the Confidence Building Measures (CBMs) remains the only permanent transparency building tool of the BWC.

This Reader, as its forerunners, presents information on CBM-related developments and the data provided in the openly available CBMs of the current year. The CBM Reader aims to underline the importance of participating in the CBM data exchange as the only established permanent transparency tool for the BWC and to highlight the particular efforts of an increasing number of states to foster transparency by making their CBM submissions available to the public. The CBM Reader series is prepared as part of our efforts to increase transparency around bioweapon relevant activities globally. Such transparency is indispensable for building confidence in compliance with the BWC and must extend to all stakeholders including civil society. For more information please visit www.biological-arms-control.org/projects_improvingthecbms.html.

Development of the CBM regime in 2020

The last formal decision of States Parties with regard to CBMs dates back to 2011. On the 7th Review Conference in 2011 BWC States Parties decided to address CBMs in the 2012 and 2013 the Meetings of Experts and the Meetings of States Parties. It was aimed to discuss a possible update of the CBM forms (that date back to the year 1992) in the ISP, but BWC members did not agree on recommendations for a formal decision at the 8th Review Conference. Some States Parties, however, contributed working papers during the ISP and for the 8th Review Conference (see page 3). On the 8th Review Conference in 2016 Member States came to very few forward-looking decisions in general – and to no decision with regard to CBMs in particular.

Figures shown in this reader also illustrate the need for a debate on how a more active participation in the mechanism could be reached. The debates in the precedent ISP meetings and at the Review Conference show that these issues have potential for development.

Facts about the BWC and its CBMs¹⁾

BWC States Parties: 183

New BWC States Parties in 2020: None

States Parties with national contact points: 118

CBMs submitted in 2020: 75 as of November 25, 2020

Public CBMs in 2020: 29 as of November 25, 2020

First-time public CBM submission in 2020: None

Number of states having participated in the CBM data exchange in 30 years: 116

¹⁾ For reference see data provided by BWC Implementation Support Unit (ISU), accessible at www.unog.ch

CBM-specific publications in 2020

We could not find any publications on the issue of the CBM mechanism published in 2020.

For earlier publications, please check former versions of this reader at: http://biological-arms-control.org/projects_improvingthecbms.html.

Participation in the CBM regime in 2020

As on 25. November 2020, 73 BWC states parties had submitted their CBM (or expressed their intention to do so before the MSP). Therewith the long-time phenomenon that participation is relatively high in years with Review Conferences, but drops down significantly in the following year, does only appear in a moderated form. The overall participation in the CBM mechanism improved slightly over time. Since the beginning of the data exchange in 1987, the annual level of participation was never higher than 45 percent of the BWC states parties, in 2020 74 of the member states have submitted a CBM. In total, 116 countries submitted a CBM at least once. This means that 66 BWC states parties have yet to submit their first CBM declaration. Continuity in states' participation also remains weak: Only 37 countries have submitted a CBM in each of the past 10 years, and 25 countries have submitted a CBM only once or twice since 1987.

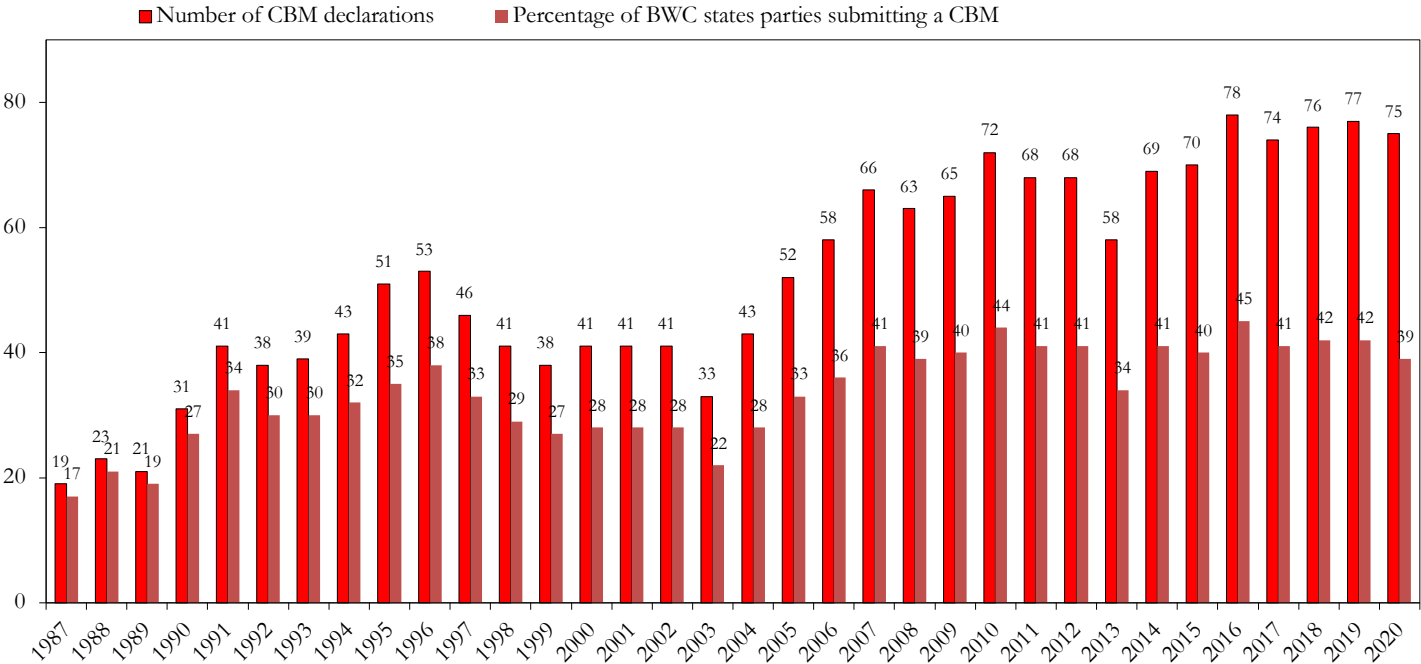
First time submission in 2020: Maldives (but not publicly available)

First-time public submission in 2020: None

CBM submissions in 2020 (States in bold made their CBM available to the public.):

- | | | | | |
|---------------------|---------------------------|----------------------|-------------------------|--------------------------|
| 1. Argentina | 15. Czech Republic | 30. Jordan | 45. New Zealand | 59. Singapore |
| 2. Australia | 16. Denmark | 31. Kazakhstan | 46. Nicaragua | 60. Slovakia |
| 3. Austria | 17. Ecuador | 32. Kenya | 47. Nigeria | 61. Slovenia |
| 4. Belarus | 18. El Salvador | 33. Kyrgyzstan | 48. Oman | 62. South Africa |
| 5. Belgium | 19. Estonia | 34. Latvia | 49. Peru | 63. Spain |
| 6. Brazil | 20. Finland | 35. Liechtenstein | 50. Philippines | 64. Suriname |
| 7. Brunei | 21. France | 36. Lithuania | 51. Poland | 65. Sweden |
| 8. Darussalam | 22. Georgia | 37. Malaysia | 52. Portugal | 66. Switzerland |
| 9. Bulgaria | 23. Germany | 38. Maledives | 53. Qatar | 67. Thailand |
| 10. Canada | 24. Greece | 39. Malta | 54. Rep. Korea | 68. Turkey |
| 11. Chile | 25. Hungary | 40. Mexico | 55. Rep. Moldova | 69. Ukraine |
| 12. Colombia | 26. India | 41. Montenegro | 56. Russian Fed. | 70. United Arab Emirates |
| 13. Cuba | 27. Iraq | 42. Morocco | 57. Serbia | 71. UK |
| 14. Cyprus | 28. Italy | 43. Myanmar | 58. Seychelles | 72. USA |
| | 29. Japan | | | 73. Uzbekistan |

Figure 1. CBM submissions per year between 1987 and 2020 (Numbers in this figure may differ from numbers provided by the Implementation Support Unit. This is due to differences in counting states that where formerly part of other states, such as the former republics of the Soviet Union. This figure provides the actual number of CBM declarations submitted in the respective year.)



As of 25 November 2020, 27 countries have made their 2019 CBM declarations publicly available. All of the 27 publicly available CBMs can be found on the website of the Implementation Support Unit (ISU) (<https://bwc-ecbm.unog.ch/group/ecbm-portal>):

Australia, Austria, Belgium, Canada (in English and French), Cyprus, Czech Republic, Denmark, Estonia, Finland, Germany, Japan, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, New Zealand, Portugal, Republic of Moldova, Romania, Serbia, Slovakia, Slovenia, Sweden, Switzerland, Ukraine, United Kingdom and the USA.

Belgium and the USA provided two separate versions of their CBMs, one for the restricted part of the ISU website and one for the public.

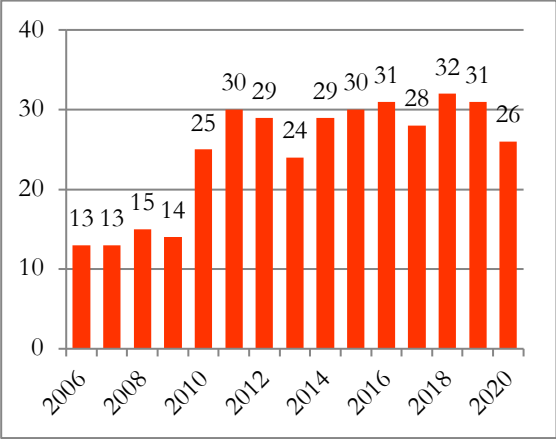


Table 1. Countries that made their CBM declarations publicly available, 2007-2020

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Albania				x										
Australia	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Austria			x	x	x	x	x		x	x	x	x	x	x
Bangladesh		x												
Belgium					x	x	x	x	x	x	x	x	x	x
Brazil				x										
Bulgaria	x	(x)		(x)	(x)	(x)	(x)	x	x	x	x	x	x	x
Canada (En and Fr)					x	x	x	x	x	x	x	x	x	x
Croatia								x				x		
Cyprus					(x)	(x)							x	x
Czech Republic			x	x	x	x	x	x	x	x	x	x	x	x
Denmark	x	x		x	x	x		x	x	x	x	x	x	x
Ecuador					(x)									
Estonia				(x)	(x)		x			x	x	x	x	x
Finland	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Georgia			(x)	(x)	(x)									
Germany	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Greece					(x)	x	x							
Hungary								(x)	(x)					
Ireland	x	x	x	x	x				x	x	x	x	x	
Japan						x	x	x	x	x	x	x	x	x
Latvia			(x)		x	x	x	x	x	x	x	x	x	x
Liechtenstein	x	(x)	(x)	(x)	(x)		(x)	(x)						
Lithuania	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Luxembourg								(x)	x	x	x	x	x	
Madagascar						(x)								
Malaysia					x									
Mauritius										x				
Mexico									x	x	x	x	x	x
Morocco													x	
Myanmar										x		x		
Netherlands							(x)	x	x	x	x	x	x	x
New Zealand	(x)	(x)		(x)	x	x	x	x	x	x	x		x	x
Norway		(x)		x	x	x	x		x	x	x	x	x	
Poland				x										
Portugal				x	x	x	x	x	x	x	x	x	x	x
Qatar						(x)	(x)							
Republic of Moldova						x	x	x	x	x		x		x
Romania		x	x	x	x	x	x	x	x	x	x	x	x	x
Senegal				x										
Serbia						(x)		(x)	x		x	x	x	x
Slovakia								(x)				x	x	x
Slovenia								x	x	x	x	x	x	x
Sweden	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Switzerland	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Thailand				(x)	(x)	(x)								
Turkey					x	x		x	x	x	x	x		
Ukraine					(x)	(x)			x	x	x	x	x	x
United Kingdom	x	x	x	x	x	x	x	x	x	x	x	x	x	x
USA				x	x	x	x	x	x	x	x	x	x	x
Total	13	15	14	25	30	29	24	29	30	31	28	32	31	27

As shown in Table 1 above 50 countries have made their CBM publicly available at least once since 2007. “(x)” indicates that states provided their CBM directly to the Hamburg Research Group. Many states make their CBMs publicly available in an erratic way. No explanation readily offers itself for why many states make their CBMs publicly available in one year but not in another.

Summary of data in publicly available 2020 CBM declarations

A summary of the data declared in the publicly available CBMs of 2020 is provided in the table below. More detailed information can be found in the Annex to this Reader. 36 maximum biological containment facilities were declared in publicly available CBMs in 2020, four of which were partially or wholly funded by ministries of defence. 16 of the 31 countries making their 2020 CBM publicly available declared having a biodefence programme; they provided information on 58 biodefence facilities. And lastly, 29 unusual disease outbreaks and 71 vaccine production facilities were declared in the 31 publicly available CBMs of 2020.

Table 2. Summary of data in publicly available CBM declarations, 2020

Form A, part 1:	Number of maximum biological containment facilities (BSL-4 or equivalent) declared.
Form A, part 2 (i):	Does the state party declare having a biodefence programme?
Form A, part 2 (iii):	Number of biodefence facilities declared.
Form B (ii):	Number of unusual disease outbreaks declared.
Form F:	Does the state party declare having a past offensive and/or defensive programme?
Form G:	Number of vaccine production facilities declared.
ND / NN:	“Nothing to declare” / “Nothing new to declare” indicated in Form X.

Country	Form A, part 1	Form A, part 2 (i)	Form A, part 2 (iii)	Form B (ii)	Form F (off/def)	Form G
Australia	4	yes	1	0	no/no	2
Austria	0	yes	1	ND	no/no	ND
Belgium	0	yes	1	ND	ND	0
Canada	2	yes	2	15	yes/yes	15
Cyprus	ND	ND	ND	ND	ND	ND
Czech Republic	2	no	ND	ND	NN	4
Denmark	0	yes	1	ND	no/yes	2
Estonia	0	no	ND	ND	ND	ND
Finland	0	yes	1	ND	ND	ND
Germany	3	yes	5	0	NN	8
Japan	2	yes	1	ND	NN	6
Latvia	0	yes	1	ND	NN	ND
Lithuania	0	no	ND	ND	no/no	NN
Mexico	0	no	ND	ND	ND	2
Netherlands	0	yes	1	0	no/yes	7
New Zealand	0	ND	ND	ND	no/no	ND
Portugal	0	yes	1	ND	no/yes	1
Republic of Moldova	0	yes	0	n.a.	NN	ND
Romania	0	ND	ND	ND	ND	4
Serbia	ND	no	ND	ND	no/no	1
Slovakia	ND	ND	ND	ND	ND	ND
Slovenia	0	no	ND	ND	ND	ND
Sweden	1	yes	2	ND	no/no	1
Switzerland	2	yes	10	0	no/yes	2
Ukraine	0	no	ND	ND	ND	5
United Kingdom	10	yes	1	0 ¹	yes/yes	5
USA	10	yes	26	14 ²	NN	10

¹ No outbreaks of human related disease, but there were three cases of monkeypox, which were known to relate to importation of disease to the UK through international travel.

² Two human disease events and 12 animal disease events.

ANNEX

The following table summarizes the data declared in **CBM Form A, Part 1**, of the publicly available CBM submissions from 2020 (covering 2019) and compares them with the information in publicly available CBMs from 2007 to 2020. The table provides the names and locations of facilities declared in CBM Form A, part 1, their containment levels, the year(s) they were declared, and whether the facilities were wholly or partly funded by ministries of defence (MoD). Grey cells indicate that there was no CBM submission. Grey cells with “n.p.” indicate that it was not made publicly available (either on the ISU-website or by providing the Hamburg Research Group with the CBM) in the respective year. “ND” indicates that the state ticked the “Nothing to declare” box in Form 0. “NN” indicates that the state ticked the “Nothing new to declare” box in Form 0 and provided no further information. “/” indicates that no data were provided.

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?	
Australia	1. Australian Animal Health Laboratory (East Geelong) 2. National High Security Quarantine Laboratory (Melbourne) 3. Queensland Health and Forensic Scientific Services (Coopers Plains) 4. Emerging Infectious Disease and Biohazard Response Unit (Westmead)	BL4	x	x	x	x		x									no	
		BL4	x	x	x													no
		BL4	x	x	x		NN	x			NN	NN	NN	NN	NN	NN		no
		BL4	/	x	x			x										no
Austria	Federal Ministry of Defence and Sport (Vienna)	BL3	n.p.	n.p.	x	x	x	x	x	x	x	x	x	x	x	x	wholly	
Belgium	Fédéral d'Orientation (FOI) de la défense (DLD)	BL3	n.p.	n.p.	n.p.	n.p.	ND	ND	ND	ND	x	x	x	ND	ND	ND	partly	
Bulgaria	1. National Center of Infectious and Parasitic Diseases (Yanko Sakazov Blvd., Sofia) 2. Department of Microbiology and Virology, Military Medical Academy (St. Georgi Sofijski Str., Sofia) 3. National Diagnostic Research Veterinary Medicine Institute (Pencho Slaveikov Blvd., Sofia)	BL3	x	x		x	x	x				x			/			
		BL3	/	/	n.p.	/	/	/			NN	x	NN	NN	x	x	n.p.	
		BL3	/	/		x	/						x		x			n.p.
Canada	1. National Microbiology Laboratory (Winnipeg) 2. National Center for Foreign Animal Disease (Winnipeg)	BL4	n.p.	n.p.	n.p.	n.p.	x	NN	NN	NN	x	x	NN	NN	x	x	no	
		BL4					x				x	x			x	x	no	
Croatia	<i>Nothing to declare</i>	/	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	ND	n.p.	n.p.	n.p.	ND				
Cyprus	<i>Nothing to declare</i>	/	n.p.	n.p.	n.p.	n.p.	ND	ND	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	NN	NN	/	

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?	
Czech Rep.	1. State Veterinary Institute Jihlava (Jihlava)	BL3	/	/			x	/		/							/	
	2. State Veterinary Institute Prague (Lysolajc)	BL3	/	/			x	/		/							/	
	3. Tekro, spol.s.r.o. (Uničov)	BL3	/	/			x	/		/							/	
	4. Collection of Animal Pathogenic Microorganisms, Veterinary Research Institute / former Microbiological Laboratory BSL-3 (Brno)	BL3	x	x			x	/		/								/
	5. Institute of Molecular Pathology (Hradec Králové)	BL3	x	x			x	x		/								/
	6. Military Health Institute, Biological Defence Department at Technonin / former Central Military Health Institute, Department Těchonín (Těchonín)	BL4	x	x			x	x			x							wholly
	7. Central Military Health Institute, Department Prague (Prague)	BL2	/	/	NN	NN	x	x	NN	NN	/	NN	NN	NN	NN	NN	NN	/
	8. Laboratory for Biological Monitoring and Protection, Department of Biological Protection, National Institute for Nuclear, Chemical and Biological Protection (Mlín)	BL4	/	x			x	x			x							no
	9. Laboratory of Molecular Biology (Hradec Králové)	BL2	/	x			/	/			/							/
	10. Division of Infectious Diseases, Department of Infectious Diseases and Epizootology, Faculty of Veterinary Medicine (Brno)	BL3	/	/			x	x			/							/
	11. National Institute of Public Health; Centre of Epidemiology and Microbiology (Šrobárova)	BL3	/	/			x	x			/							/
	12. Bioveta, a.s. (Ivanovice na Hané)	BL3	/	/			x	x			/							/
Denmark	1. Centre for Biosecurity and Biopreparedness / former National Centre for Biological Defence (Copenhagen)	BL2	/	x	n.p.	x	/				ND	ND	ND	ND	ND	NN	/	
	2. Larger university in Denmark - anonymous (no location provided)	BL3	/	/		/	x	ND	ND	ND	ND	ND	ND	ND	ND	NN	no	
	3. TB Vaccine Research (Copenhagen)	BL3	/	/		/	x										no	

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?
	4. QC Bio (Copenhagen)	BL3	/	/		/	x										no
	5. International Reference Laboratory of Mycobacteriology (Copenhagen)	BL3	/	/		/	x										no
Ecuador	<i>Nothing to declare</i>	/	n.p.	n.p.			ND		n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Estonia	1. Joint Laboratories of Tartu University Clinics (Tartu)	BL3							/			x	x	x	x	x	/
	2. Microbiology Laboratory of North-Estonia Regional Hospital	BL3							/			x	x	x	x	x	/
	3. Veterinary & Food Laboratory	BL3							/			x	x	x	x	x	/
	4. Laboratory for Mycobacteriosis of University of Life Sciences	BL3	n.p.	n.p.	n.p.	ND	ND		/	n.p.	ND	x	x	x	x	x	/
	5. Institute of Biomedicine and Translational Medicine of Tartu University	BL3							/			/	/	/	/	/	/
	6. Laboratory of Communicable Diseases of Estonian Health Board	BL3							/			/	/	/	/	/	/
	7. Synlab/Estonia	BL3							/			/	/	/	/	/	/
Finland	1. Centre for Biothreat Preparedness / Finnish Defence Forces, Centre for Military Medicine, Research and Development Department (Helsinki)	BL3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	wholly
	2. Finnish Institute of Health and Welfare, bacteriological and virological laboratories (Helsinki, Turku)	BL3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	no
	3. Yersinia Research Laboratory, University of Helsinki (Helsinki)	BL2	x	x	x	x	x	x	x	x	x	x	/	/	/	/	no
	4. Department of Virology, Viral Zoonoses Group, University of Helsinki (Helsinki)	BL3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	no
	5. Institute of Biotechnology (Helsinki)	BL3	/	/	/	/	/	/	x	/	/	/	/	/	/	/	/
	6. Finnish Food Safety Authority (Ruokavirasto) (Helsinki)	BL3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	no
	7. Finnish Defence Research Agency (FDRA) (Lakiala)	BL3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	wholly
	8. Department of Food and Environmental Sciences, University of Helsinki (Helsinki)	BL3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?
Georgia	9. <i>Clostridium botulinum</i> laboratory, University of Helsinki (Helsinki)	BL2	/	/	/	/	/	/	/	x	x	x	x	x	x	x	no
	1. National Center for Disease Control and Public Health (Tbilisi)	BL2	n.p.	n.p.	x	x	x	x	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
	2. Laboratory of Ministry of Agriculture of Georgia (Tbilisi)	BL2	n.p.	n.p.	/	x	x	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Germany	1. Bernhard-Nocht-Institut für Tropenmedizin (Hamburg)	BL4	x	x	x	x	x	x	x	x	x	x	x	x	x	x	no
	2. Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health (Insel Riems)	BL4	x	x	x	x	x	x	x	x	x	x	x	x	x	x	no
	3. Institut of Virology at the University of Marburg (Marburg)	BL4	x	x	x	x	x	x	x	x	x	x	x	x	x	x	no
Greece	1. University of Crete School of Medicine (Heraklion)	BL3					x										
	2. Kapodistrian University of Athens School of Medicine (Athens)	BL3					x										
	3. The National Arbovirus and Hemorrhagic Fever Viruses Reference Laboratory at Aristotelian University of Thessaloniki (Thessaloniki)	BL3	n.p.	n.p.	n.p.		x	NN	NN	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
	4. Infectious Diseases Hospital (Thessaloniki)	BL3					x										
	5. Hellenic Pasteur Institute (Athens)	BL3					x										
	6. Athens School of Public Health (Athens)	BL3					x										
Hungary	National Center for Epidemiology (Buda-pest)	BL4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	x	x	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Ireland	1. University College Dublin, National Viral Reference Laboratory (Dublin)	BL3+	x	x	x	x	x			x	x	x	NN	x	NN		
	2. Public Health Laboratory, Cherry Orchard Hospital (Dublin)	BL3	x	x	x	x	x			x	x	x	NN	x	NN		
Japan	1. Murayama Annex of National Institute of Infectious Diseases / former National Institute of Health (Tokyo)	BL4	n.p.	n.p.	n.p.	n.p.	n.p.	x	NN	NN	NN	NN	NN	NN	NN	NN	no
	2. RIKEN Tsukuba Campus (Ibaraki)	BL4	n.p.	n.p.	n.p.	n.p.	n.p.										no

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?		
Latvia	1. Riga East University Hospital Latvian Centre of Infectious Diseases, National Microbiology Reference Laboratory (Linezera Street, Riga) 2. Latvian Biomedicine Research and Study centre (Ratsupites, Riga) 3. Centre for Disease Prevention and Control of Latvia (Duntes Street, Riga)	BL3				n.p.	x	x	x	x	x	x	x	x			no		
		BL2	n.p.	n.p.	ND		/	/	/	/	/	/	x	x			no		
		BL3					/	/	/	/	/	/	/	/	/			/	
Lichtenstein	/	NN	NN	NN	NN	NN	n.p.	NN	NN	n.p.	NN	NN	NN	NN	NN	NN	NN		
Lithuania	1. National Public Health Surveillance Laboratory / former Microbiological Laboratory of Vilnius Public Health Centre (Vilnius) 2. Laboratory of Centre for Communicable Diseases and AIDS / former Lithuanian AIDS Center Laboratory (Vilnius) 3. National Food and Veterinary Risk Assessment Institute / former National Veterinary laboratory (Vilnius)	BL3	x	x	x	x	x	x	x	x							no		
		BL2	x	x	x	x	/	/	/	/	NN	NN	NN	NN	NN	NN	/		
		BL3	x	x	x	x	x	x	x	x	x							no	
Luxembourg	Laboratoire de santé (Dudelange)	BL3	n.p.			n.p.	n.p.	ND		n.p.	x	NN	NN	NN	NN				
Madagascar	/	/																	
Malaysia	1. Animal and Plant In vitro Laboratory, Biotechnology Research Institute, Universiti Malaysia Sabah (Kota Kinabalu) 2. Biochemistry Laboratory, Biotechnology Research Institute, Universiti Malaysia Sabah (Kota Kinabalu) 3. Genomics Laboratory, Biotechnology Research Institute, Universiti Malaysia Sabah (Kota Kinabalu) 4. Microbiology Laboratory, Biotechnology Research Institute, Universiti Malaysia Sabah (Kota Kinabalu) 5. Natural Product Chemistry Laboratory, Biotechnology Research Institute, Universiti Malaysia Sabah (Kota Kinabalu)	BL3					x												
		BL3					x												
		BL3				n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
		BL3					x												
		BL3					x												

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?	
	6. Medical Laboratories for medical microbiology, parasitology and virology (Serdang)	BL2					x											
	7. Biosafety Level 3, Animal Biosafety Level 3 Laboratory (Serdang)	BL3					x											
	8. Plant Biotech Facility, Centre for Research in Biotechnology for Agriculture (Kuala Lumpur)	/					x											
	9. Institute for Systems Biology (Bangi)	BL2					x											
	10. Veterinary Research Institute (Ipoh)	BL3					x											
	/	/	n.p.	n.p.	n.p.								ND		n.p.	n.p.		
	1. Universidad de Monterrey (Nuevo León)	BL3										x	x		n.p.		x	no
	2. Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán. Laboratorio Nacional de Máxima Seguridad Biológica para el Estudio de la Tuberculosis y Enfermedades Emergentes (INMSBETEE) (Tlalpan)	BL3										x	x				x	no
	3. Centro de Investigación en Tecnología y Diseño del Estado de Jalisco A.C. Dirección de Biotecnología Médica y Farmacéutica (Jalisco)	BL3										x	x				x	no
	4. Laboratorios de Diagnóstico del Departamento de Medicina Zootecnia de Cerdos, Facultad de Medicina Veterinaria y Zootecnia (Coyoacán)	BL3										x	x	NN	NN	NN	/	/
5. Instituto Nacional de Enfermedades Respiratorias Ismael Cosío Villegas. Unidad de Investigación (Tlalpan)	BL3										x	x				x	no	
6. Instituto de Diagnóstico y Referencia Epidemiológicos "Dr. Manuel Martínez Báez". Dirección General de Epidemiología. Secretaría de Salud. (Álvaro Obregón)	BL3										x	x				x	no	
7. Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria. Comisión México Estados Unidos para la prevención de la	BL3										x	x				x	no	

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?	
	Fiebre Aftosa y otras enfermedades exóticas de los animales (Cuzajimalpa)																	
	8. Laboratorio Estatal de Salud Pública del Estado de Sonora (Sonora)	BL3									x	x				x	no	
	9. Universidad Nacional Autónoma de México. Instituto de Investigaciones Biomédicas (Coyoacán)	BL3									x	x				x	no	
	10. Laboratorio Estatal de Salud Pública de Veracruz (Veracruz)	BL3									x	x				/	/	
	11. Centro Nacional de Servicios de Diagnóstico en Salud Animal (Pachuca de Sonora)	BL3									x	x				/	/	
Morocco	/	/	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	NN	n.p.	n.p.	
Myanmar	/	/																
Netherlands	1. TNO Department of CBRN Protection (Rijswijk)	BL3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.		/	x	x	x	x	x	x	mostly	
	2. National Institute for Public Health and the Environment (Bilthoven)	BL3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	x	x	x	x	x	x	x	x	no	
New Zealand	National Centre for Biosecurity and Infectious Disease (Upper Hut)	BL3+	x	x	n.p.	x	x	x	x	x	x	x	x		x	x	no	
Norway	Institute of Microbiology, Armed Forces Medical Services (Oslo)	BL3	n.p.	x	n.p.	x	NN	NN	NN	NN	NN	ND	ND	ND	ND			
Portugal	1. Laboratório de Bromatologia e Defesa Biológica (Lisbon)	BL3				x	x	x	x	x	x						partly	
	2. Unidade de reposita a Emergências e Bio-preparação (Lisbon)	BL3				x	/	/	/	/	/						/	
	3. Departamento de Doenças Infecciosas (Lisbon)	BL3				/	/	x	x	x	x						no	
	4. Unidade de reposita a Emergências e Bio-preparação (Braga)	BL3				/	/	/	/	/	/							/
	5. Instituto Nacional de Investigação Agrária e Veterinária, Unit of Animal Health (Lisbon & Vila do Conde)	BL3				/	/	x	x	x	x							no
	6. Life and Health Sciences Research Institute (Braga)	BL3				/	/	/	x	x	x							/

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?
	7. Instituto de Tecnologia Química e Biológica (Lisbon)	BL3			/	/	/	/	/	/	x						no
	8. Departamento de Farmácia Galénica e Tecnologia Farmacéutica (Lisbon)	BL3			/	/	/	/	/	x	x						no
	9. Departamento de Microbiologia e Imunologia (Lisbon)	BL3			/	/	/	/	/	x	x						/
	10. Faculdade de Ciências da Universidade de Lisboa (Lisbon)	BL3			/	/	/	/	/	/	/						no
Qatar	/		n.p.	n.p.	n.p.	n.p.	ND	ND	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Republic of Moldova	1. National Center for Public Health (Chisinau)	BL3			n.p.	n.p.	x	x	NN	NN	NN	NN		NN		NN	/
	2. Republican Center for Veterinary Diagnostics (Chisinau)	BL3			n.p.	n.p.	/	x	NN	NN	NN	NN		NN		NN	/
Romania	1. Military Medical Research Center (Bucharest)	BL2+1	x				x	x	x	/	/	x	x	x	x	x	wholly
	2. National Society "Pasteur Institute" (Bucharest)	BL2	/				/	/	/	x	x	x	x	x	x	x	no
	3. Institute for Hygiene and Veterinary Public Health (Bucharest)	BL2	/				/	/	/	x	x	x	x	x	x	x	no
	4. "Cantacuzino" National Medico-Military Institute of Research and Development (Bucharest)	BL2 ²	/		NN	NN	/	x	/	/	/	x	x	x	x	x	no
	5. Institute for Diagnosis and Animal Health (Bucharest)	BL3	/				/	/	/	/	/	x	x	x	x	x	no
	6. Institute for Control of Veterinary Biological Products and Medicines (Bucharest)	BL2	x				/	/	/	/	/	x	x	x	x	x	/
	7. National Institute for Infectious Diseases "Matei Bals" (Bucharest)	BL3 ³	/				/	/	/	/	/	/	/	/	/	/	x
Serbia	<i>Nothing to declare</i>	/	n.p.	n.p.	n.p.	n.p.	n.p.	ND	n.p.	ND	ND	n.p.	ND	ND	ND	ND	/
Slovakia	<i>Nothing to declare</i>	/								ND	ND			ND	ND	NN	/

¹ Biosafety level 3 is under construction (2020, p. 6)

² Biosafety level 3 is not operational (2020, p. 10)

³ Biosafety level 3 is not fully operational, pending validation (2020, p. 7)

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?
Slovenia	<i>Nothing new to declare</i>	BL3 ⁴	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	NN	NN	NN	NN	NN	NN	ND	/
Sweden	1. Swedish Defence Research Agency Division of NBC Defence (Umea)	BL3	x	x	x	x	x	/	/	/	/	/	/	x	/	/	/
	2. High Containment Laboratory, Public Health Agency of Sweden (Solna)	BL4	x	x	x	x	x	x	x	x	x	x	x	x	x	x	no
	3. National Veterinary Institute (Uppsala)	BL3	x	x	x	x	x	/	/	/	/	/	/	x	/	/	/
Switzerland	1. Labor Spiez (Spiez)	BL3				x	x	x	x	x	x	x	x	x	x	x	partly
	2. Institute of Virology and Immunology (Mittelhäusern)	BL3			NN	x	x	x	x	x	x	x	x	x	x	x	no
	3. National Reference Center for Emerging Viral Infections (Geneva)	BL4		NN	NN	x	x	x	x	x	x	x	x	x	x	x	no
	4. Institute of Medical Virology (Zurich)	BL4				/	/	/	/	x	x	x	x	x	x	x	no
Thailand	<i>Nothing new to declare</i>	/		n.p.		NN	NN	NN	n.p.	n.p.		n.p.	n.p.		n.p.	n.p.	n.p.
Turkey	1. Ankara University Biotechnology Institute (Ankara)	BL2				x	x	x									
	2. Refik Saydam National Public Health Agency (Ankara)	BL3				x	/	/									
	3. Bornova Veterinary Control and Research Institute (Ankara)	BL3		n.p.	n.p.	n.p.	x	/	NN	NN	NN	NN	NN	NN	n.p.	n.p.	n.p.
	4. Diagnosis of Poultry Disease Laboratory (Ankara)	BL3				/	/	/									
	5. Biosafety Level-3 Laboratory Institute (Ankara)	BL3				/	/	x									
Ukraine	1. Governmental Scientific Oversight Institute for Biotechnology and Microorganism Culture Collection (Kiev)	/				x	x	x			/	/	/	x	/	/	/
	2. State institution "Institute of Microbiology and Immunology I.I. Mechnikov of the National Academy of Medical Sciences of Ukraine" (Khar'kov)	/		n.p.	n.p.	n.p.	x	x	n.p.	n.p.	x	x	x	x	x	x	no
	3. State institution "Institute of Epidemiology and Infectious Diseases named after L.V.Gromashevsky NAMS of Ukraine"	BL2				x	x	x			x	/	x	x	x	x	no

⁴ Slovenia has one laboratory with BSL3 level (2020, p.4), but does not provide further information.

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?	
United Kingdom	(Kiev)																	
	4. State institution "Ukrainian Research Anti-Plague Institute I.I. Mechnikov" of the Ministry of Health of Ukraine (Odessa)	BL3					x	x			x	x	x	x	x	x	no	
	5. Central Sanitary Epidemiological Station (Kiev)	BL3					x	x			/	/	/	/	/	/	/	
	6. State institution "Lviv Research Institute of Epidemiology and Hygiene of the Ministry of Health of Ukraine" (Lviv)	BL3					x	x			x	x	x	x	x	x	no	
	7. National Scientific Center "Institute of Experimental and Clinical Veterinary Medicine" (Kharkov)	BL2					/	x			x	x	x	x	x	x	no	
	8. Institute of Veterinary Medicine of the National Academy of Agrarian Sciences of Ukraine (Kiev)	/					/	x			x	x	x	/	x	x	no	
	9. State institution "Center for Public Health of the Ministry of Health of Ukraine" / former State institution "Ukrainian Centre for Disease Control and Monitoring of the Ministry of Health of Ukraine" (Kiev)	BL3					/	/				x	x	x	x	x	x	no
	10. State Scientific Control Institute of Biotechnology and Microorganism Strains (Kiev)	BL2					/	/				x	x	x	x	x	x	no
	11. State Research Institute of Laboratory Diagnostics and Veterinary and Sanitary Expertise (Kiev)	BL2					/	/				/	/	/	x	x	x	no
	1. Defence Science and Technology Laboratory, Porton Down (Salisbury)	BL4					x	x	x	x	x	x	x	x	x	x	x	yes
	2. Public Health England - Colindale (London)	BL4					x	x	x	x	x	x	x	x	x	x	x	no
3. Public Health England - Porton (Salisbury)	BL4					x	x	x	/	x	x	x	x	x	x	x	no	
4. National Institute for Biological Standards and Control (Potters Bar)	BL4					x	x	x	x	x	x	x	x	x	x	x	no	
5. The Francis Crick Institute Containment 4 facility (London)	BL4					x	x	x	x	x	x	x	x	x	x	x	no	
6. The Pirbright Institute (Pirbright)	SAPO4					/	/	/	x	x	x	x	x	x	x	x	no	

Country	Name and location of facilities declared in CBM Form A, Part 1	Cont. Level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	MoD funded?	
United States of America	7. Animal and Plant Health Agency (Addlestone)	SAPO4	x	x	x	x	x	x	x	x	x	x	x	x	x	x	no	
	8. Institute for Animal Health, Pirbright Laboratory (Woking)	SAPO4	x	x	x	x	x	x	/	/	/	/	/	/	/	/	/	
	9. Boehringer Ingelheim Animal Health UK Limited, former Merial Animal Health, Biological Laboratory (Pirbright)	SAPO5	/	x	x	x	x	x	x	x	x	x	x	x	x	x	no	
	10. Schering-Plough Animal Health (Uxbridge)	SAPO4	/	x	/	/	/	/	/	/	/	/	/	/	/	/	/	
	1. Georgia State University - High Containment Core (Atlanta, GA)	BL4				x	x	x	x	x	x	x	x	x	x	x	x	partly
	2. The Betty Slick and Lewis J. Moorman, Jr. Laboratory Complex (San Antonio, TX)	BL4				x	x	x	x	x	x	x	x	x	x	x	x	partly
	3. Galveston National Laboratory (Galveston, TX)	BL4				x	x	x	x	x	x	x	x	x	x	x	x	partly
	4. Plum Island Animal Disease Center (Greenport, TX)	BL3				x	x	/	/	/	/	/	/	/	/	/	/	/
	5. U.S. Army Medical Research Institute of Infectious Diseases (Fort Detrick, MD)	BL4				x	x	x	x	x	x	x	x	x	x	x	x	partly
	6. National Biodefense Analysis and Countermeasures Center (Fort Detrick, MD)	BL4			n.p.	/	/	x	x	x	x	x	x	x	x	x	x	no
	7. Integrated Research Facility at Rocky Mountain Laboratories (Hamilton, MT)	BL4			n.p.	/	/	x	x	x	x	x	x	x	x	x	x	no
8. Coordinating Center for Infectious Diseases (Atlanta, GA)	BL4				x	/	/	/	/	/	/	/	/	/	/	/	/	
9. CDC, Deputy Director for Infectious Diseases (Atlanta, GA)	BL4				/	/	x	x	x	x	x	x	x	x	x	x	no	
10. Integrated Research Facility at Fort Detrick - NIAID (Fort Detrick, MD)	BL4				/	/	/	/	/	x	x	x	x	x	x	x	no	
11. The Boston University National Emerging Infectious Diseases Laboratories - NEIDL (Boston)	BL4				/	/	/	/	/	/	/	/	/	/	/	/	no	

The following table summarizes the data declared in **CBM Form A, Part 2 (ii) and Part 2 (iii)** of the publicly available CBM submissions from 2020 and compares them with the information in publicly available CBMs from 2007 to 2019. The table indicates the overall funding for the bio defence programme as declared in CBM Form A, part 2 (ii), and lists the names and locations of bio defence facilities declared in CBM Form A, part 2 (iii), specifying the year(s) they were declared. Grey cells indicate that there was no CBM submission or that it was not made publicly available in the respective year. "ND" indicates that the state ticked the "Nothing to declare" box in Form 0. "n.p." indicates that the state ticked the "Nothing new to declare" box in Form 0. "/" indicates that no data were provided.

Country	Total funding in million EUR declared in Form A, Part 2 (ii) ⁵										Name and location of facilities declared in CBM Form A, Part 2 (iii)																			
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Decd. 2007	Decd. 2008	Decd. 2009	Decd. 2010	Decd. 2011	Decd. 2012	Decd. 2013	Decd. 2014	Decd. 2015	Decd. 2016	Decd. 2017	Decd. 2018	Decd. 2019	Decd. 2020		
Australia	1.5	1.6	1.7	1.7	2	2	2	1.7	1.7	2.1	2.1	2.3	2.2	1.8	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Austria	n.p.	n.p.	0.01	0.03	0.05	0.03	0.02	0.09	0.09	0.02	0.09	0.63	5	n.p.	n.p.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Belgium	n.p.	n.p.	n.p.	n.p.	0.6	1	0.3	0.3	0.4	0.2	0.3	0.26	0.24	0.27	n.p.	n.p.	n.p.	n.p.	x	x	/	x	x	x	x	x	x	x	/	
Bulgaria	/	/	n.p.	/	/	NN	NN	NN	NN	ND	ND	ND	NN	n.p.	x	x	n.p.	x	x	/	/	/	/	/	/	/	/	/	/	/
Canada	n.p.	n.p.	n.p.	n.p.	6	6.6	9.3	9.6	6.5	6.6	6.3	4	3.1	2.4	n.p.	n.p.	n.p.	n.p.	x	x	x	x	x	x	x	x	x	x	x	x
Croatia	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	ND	n.p.	n.p.	n.p.	ND			n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	ND	n.p.	n.p.	n.p.	n.p.	ND			

⁵ National currencies were converted to Euros using the online service, <http://www.finanzen.net/waehrungsrechner>. 15 April of each respective year, the deadline for submitting the CBM to the UN was selected as the date for the currency conversion.

Liechtenstein	NN	NN	NN	NN	n.p.	N ₁	n.p.	n.p.	n.p.	n.p.	Nothing new to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.		
Lithuania	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Nothing to declare	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Nothing to declare	ND	ND	ND	ND	ND	ND	ND	
Luxembourg	n.p.										"Luxembourg does not have national research and development programs for biological defense on the territory"	n.p.	ND	ND	ND	ND	ND	ND	ND	ND	ND	Nothing to declare	ND	ND	ND	ND	ND	ND	ND	
Madagascar											Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	ND	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Malaysia											Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Mauritius	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Mexico	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Morocco	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Myanmar											Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Netherlands	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	TNO Prins Maurits Building; Department of CBRN Protection (Riswijk)	3.6	3	3	3	3	3	3	3	3	3	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
New Zealand	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Nothing to declare	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Norway	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	1. Institute of Microbiology, FML (Kjeller) 2. Norwegian Defence Research Establishment, FFI (Kjeller) 3. Norwegian Institute of Public Health, FHI (Oslo)											1. Institute of Microbiology, FML (Kjeller) 2. Norwegian Defence Research Establishment, FFI (Kjeller) 3. Norwegian Institute of Public Health, FHI (Oslo)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Portugal	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Laboratório de Bromatologia e Defensa Biológica (Lisbon)	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Quatar											Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Republic of Moldova											The National Center of Public Health (Chisinau)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	The National Center of Public Health (Chisinau)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Romania	/	/	/	/	/	/	/	/	/	/	Military Medical Research Center (Bucharest)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Serbia	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Slovakia	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Slovenia	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	Nothing to declare	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Sweden	2.8	2.7	2.7	3.1	3.5	3.5	3.5	3.5	3.5	3.5	1. Swedish Defence Research Agency (Umea) 2. National Veterinary Institute (Uppsala)	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	1. Swedish Defence Research Agency (Umea) 2. National Veterinary Institute (Uppsala)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Switzerland	0.6	0.6	1	1.7	3.9	4.2	4.1	4.1	4.1	4.1	1. Spiez Laboratory - Swiss NBC Defence Establishment (Spiez) 2. Institute of Virology and Immunology (Mittelhausem) 3. National Reference Center for Emerging Viral Infections (Geneva)	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	1. Spiez Laboratory - Swiss NBC Defence Establishment (Spiez) 2. Institute of Virology and Immunology (Mittelhausem) 3. National Reference Center for Emerging Viral Infections (Geneva)	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	

The following table summarizes the data declared in **CBM Form G** of the publicly available CBM submissions from 2020 and compares them with the information in publicly available CBMs from 2007 to 2019. It provides the names and locations of vaccine production facilities declared in CBM Form G, the year(s) they were declared, and the diseases against which vaccines were produced. Grey cells indicate that there was no CBM submission or that it was not made publicly available in the respective year. “ND” indicates that the state ticked the “Nothing to declare” box in Form 0. “NN” indicates that the state ticked the “Nothing new to declare” box in Form 0. “/” indicates that no data were provided.

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020
Australia	1. Seqirus (Australia) Pty Ltd (Parkville and Broadmeadows, VIC)	no	yes	x	x	x	x								x	x	x
	2. Queensland Institute of Medical Research (Herston Road)	no	yes	/	x	x	x	NN	NN	NN	NN	NN	NN	NN	/	/	/
	3. Ludwig Institute for Cancer Research, Austin Hospital (Heidelberg, VIC)	no	yes	/	x	x	x								/	/	/
	4. GlaxoSmithKline Australia Pty Ltd (VIC)	no	yes	/	/	/	/								x	x	x
Austria	<i>Nothing to declare</i>	n.a.	n.a.	n.p.	n.p.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Belgium ⁷	1. GlaxoSmithKline Biologicals S.A (Rixensart)	n.a.	n.a.	n.p.	n.p.	n.p.	n.p.	x	x	x	x	x	x	x	x	/	/
	2. Pfizer Animal Health (Louvain-la-Neuve)	n.a.	n.a.	n.p.	n.p.	n.p.	n.p.	x	/	/	/	/	/	/	/	/	/
Bulgaria	1. BulBio-NCIPD Ltd (Sofia)	n.a.	n.a.	x	x		x	x	x	x	NN	NN	NN	NN	NN	NN	n.p.
	2. National Diagnostic and Research Veterinary Medical Institute (Sofia)	n.a.	n.a.	/	/	n.p.	x	/	/	/	NN	NN	NN	NN	NN	NN	n.p.
Canada	1. ID Biomedical Corporation of Quebec (GlaxoSmithKline Inc.) (Quebec City, QC)	n.a.	yes	n.p.	n.p.	n.p.	n.p.	/	NN	x	x	x	x	x	x	x	x
	2. Sanofi Pasteur Limited (Toronto, ON)	n.a.	yes	n.p.	n.p.	n.p.	n.p.	/	/	x	x	x	x	x	x	x	x

⁶ As designated by the Centers for Disease Control and Prevention (CDC) in the USA.

⁷ The list of vaccines is removed in the public version of the CBM.

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020
	3. Medicago (Quebec City, QC)	n.a.	yes					/		/	/	x	x	x	x	x	x
	4. Immunovaccine (Halifax, NS)	Anthrax	yes					/		/	/	x	x	x	x	x	x
	5. Artemis Technologies Inc., No. 50 (Guelph, ON)	no	yes					x		x	x	x	x	x	x	x	x
	6. Bioniche Life Sciences Inc., No. 8 (Belleville)	no	yes					x		x	x	/	/	/	/	/	/
	7. Biovet Inc., No. 49 (Saint-Hyacinthe, QC)	no	yes					x		x	x	x	x	x	x	x	x
	8. Gallant Custom Laboratories Inc., No. 45 (Cambridge, ON)	no	yes					x		x	x	x	x	x	x	x	x
	9. Elanco Canada Limited, No. 40 / former Novartis Animal Health Canada Inc. (Mississauga, ON)	no	yes					x		x	x	x	x	/	/	/	/
	10. Novartis Animal Health Canada Inc. (Mississauga, ON)	no	yes					/		/	/	/	x	x	x	/	/
	11. Elanco Canada Limited - Aqua Health, No. 40 / former Novartis - Aqua Health (Charlottetown (PEI) and Victoria (PEI))	no	yes					x		x	x	x	x	x	x	x	x
	12. Nutratech Inc., No. 58 (Winnipeg, MB)	no	yes					x		x	x	/	/	/	/	x	x
	13. Saskatoon Colostrum Co. Ltd., No. 44 (Saskatoon, SK)	no	yes					x		x	x	x	x	x	x	x	x
	14. Vacci-Vet Inc., No. 59 (Saint-Hyacinthe, QC)	n.a.	yes					/		/	/	/	/	/	/	x	x
	15. Ceva Animal Health Inc., No. 23 / former Vetech Laboratories Inc. (Guelph, ON)	no	yes					x		x	x	x	x	x	x	x	x
	16. Biovet Inc., No. 59 (Saint-Hyacinthe, QC)	no	yes					/		/	/	/	x	x	x	/	/
	17. InventVac (Vancouver, BC)	no	yes					/		/	/	/	/	/	x	x	x
	18. National Research Council	no	yes					/		/	/	/	/	/	x	x	x

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020
	of Canada (Ottawa, ON)																
	19. Prevtac Microbia Inc., No. 60 (Saint-Hyacinthe, QC)	no	yes					/	/	/	/	/	/	/	x	x	/
	20. Centre for Aquaculture Technologies Canada, No. 61 (Souris, PEI)	no	yes					/	/	/	/	/	/	/	/	x	x
	21. Pfizer Animal Health, No. 4 (Saanichton)	no	yes					x	/	x	/	/	/	/	/	/	/
	22. Saskatchewan Research Council, No. 57 (Saskatoon)	no	yes					x	/	x	/	/	/	/	/	/	/
	23. Vetcovac Ltée., No. 48 (Saint-Hyacinthe, QC)	no	yes					x	/	/	/	/	/	/	/	/	/
	24. Intervet Canada Corp., No. 51 (Kirkland)	no	yes					x	/	/	/	/	/	/	/	/	/
	25. Vétoquinol N.A. Inc., No. 34 (Lavaltrie)	no	yes					x	/	/	/	/	/	/	/	/	/
Croatia	Institute of Immunology	no	yes	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	x	n.p.	n.p.	n.p.	x		
Cyprus	<i>Nothing to declare</i>	n.a.	n.a.	n.p.	n.p.	n.p.	n.p.	ND	ND	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	ND	ND
Czech Republic	1. Baxter BioScience s.r.o (Kostelec nad Černými Lesy)	no	yes	x				x					/				
	2. SEVAPHARMA a.s. (Hos-tivar)	no	yes	x				x					x				
	3. Bioveta, a.s. (Ivanovice na Hané)	Anthrax	yes	x				x					x				
	4. DYNTEC, spol. s.r.o. (Te-rezín)	no	yes	x				x					x				
	5. BIOPHARM, Research Institute of Biopharmacy and Veterinary Drugs (Jlávě u Prahy)	no	yes	x				x					x				
Denmark	1. Statens Serum Institute (Copenhagen)	no	yes	x	x	n.p.		x	NN	NN	NN	NN	/	/	/	NN	NN
	2. Bavarian Nordic A/S (Kvist-gaard)	Smallpox	yes	x	x	n.p.	NN	x	NN	NN	NN	NN	x	x	x	NN	NN
	3. AJ Vaccines (Copenhagen)	no	yes	/	/			/					x	x	x		

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	
Ecuador	<i>Nothing to declare</i>	n.a.	n.a.	n.p.	n.p.			ND	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Estonia	<i>Nothing to declare⁸</i>	n.a.	n.a.	n.p.	n.p.	n.p.	ND	ND	n.p.	n.a.	n.p.	ND	ND	ND	ND	ND	ND	
Finland	<i>Nothing to declare⁹</i>	n.a.	n.a.	NN	NN	NN	NN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Georgia	<i>Nothing to declare</i>	n.a.	n.a.	n.p.	n.p.	ND	ND	ND	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Germany	1. GlaxoSmithKline Vaccines / former Novartis Vaccines and Diagnostix GmbH & Co. KG (Marburg)	Botulism	yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	2. GlaxoSmithKline Biologicals (Branch of SB Pharma GmbH & Co KG) (Dresden)	no	yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	3. IDT Biologika GmbH (Dessau-Rosslau)	Smallpox	yes	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	4. Bavaria Nordic GmbH (Berlin): relocated to denmark (2014)	Smallpox	yes	/	/	/	x	x	x	x	/	/	/	/	/	/	/	/
	5. Dynavax GmbH / former Rhein Biotech GmbH (Düsseldorf)	no	yes	/	/	/	x	x	x	x	x	x	x	x	x	x	x	x
	6. Vibalogics GmbH (Cuxhaven)	no	yes	/	/	/	/	/	/	x	x	x	x	x	x	x	x	x
	7. Burgwedel Biotech GmbH, MSD Group (Burgwedel)	Ebola	yes	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	8. CureVac AG (Tübingen)	no	yes	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	9. BioNTech Innovative Manufacturing Services GmbH	Ebola, Marburg, Lassa	yes	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Greece	<i>Nothing to declare</i>	n.a.	n.a.	n.p.	n.p.	n.p.		ND	ND	ND	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	
Hungary	1. Omnininvest Ltd. (Budapest)	no	yes	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	x	x	n.p.	n.p.	n.p.	n.p.	n.p.	

⁸ There are no vaccine producing facilities in Estonia (2020, p. 6)

⁹ There are no vaccine producing facilities in Finland (2020, p. 17)

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	
	2. GlaxoSmithKline Biological Kft. (Budapest)	no	yes								/	x						
Ireland	1. Elanco Laboratories (Sligo)	no	yes	x	x	x	x	x			x	x	/					
	2. MSD International GmbH (Carlow)	no	yes	/	/	/	/	/			x	x	x	x				
	3. MSD International GmbH / former Schering-Plough (Brinny)	no	no ¹⁰	/	/	/	/	/			x	x	x	x	NN	NN		
	4. Pfizer Ireland Pharmaceuticals (Dublin)	no	yes	/	/	/	/	/			x	x	x	x				
Japan	1. Denka Seiken Co., Ltd (To-kyo)	no	yes						x	x		x		x			x	
	2. Daiichi Sankyo Biotech Co., Ltd (Saitama)	no	yes						x	x		x		x			x	
	3. Takeda Pharmaceutical Co., Ltd (Osaka)	no	yes						x	x		x		x			x	
	4. The Research Foundation for Microbial Diseases of Osaka University (Osaka)	no	yes						x	x	NN	x	NN	x	NN	NN		x
	5. KM Biologics Co., Ltd emerged from The Chemo-Sero-Therapeutic Research Institute (Kumamoto)	no	yes							x					x			x
	6. Japan BCG Laboratory (To-kyo)	no	yes							x					x			x
	7. Japan Poliomyelitis Research Institute (Tokyo)	no	yes							x					/			/
Latvia	<i>Nothing to declare</i>	/	/	n.p.	n.p.	n.p.	n.p.	n.p.	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Liechtenstein	<i>Nothing new to declare</i>	/	/	NN	NN	NN	NN	NN	n.p.	NN	NN	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	

¹⁰ The site holds a manufacturer's authorization for medical products for human use. None of these is a vaccine (2019, p. 20)

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020
Lithuania	<i>Nothing new to declare</i> ¹¹	/	/	NN	NN	NN	NN	NN	NN	NN	NN	NN	NN	NN	NN	NN	NN
Luxembourg	<i>Nothing to declare</i>	/	/	n.p.	n.p.	n.p.	n.p.	n.p.	ND	ND	ND	ND	ND	ND	ND	ND	ND
Madagascar	/	/	/						/					n.p.		n.p.	
Malaysia	Institute of Veterinary Services (Putrajaya)	no	yes	n.p.	n.p.	n.p.	n.p.	x	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Mauritius	/	/	/	n.p.	n.p.	n.p.	n.p.					n.p.	ND		n.p.	n.p.	
Mexico	1. Centro de Investigación y Estudios Avanzados en Salud Animal, Universidad Autónoma del Estado de México (Toluca)	no	yes									x	/		/		
	2. Laboratorios de Biológicos y Reactivos de México S.A de C.V. (Colonia Popotla and Colonia Santo Tomás)	no	yes	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	x	x	NN	x	NN	NN
	3. Productora Nacional De Biológicos Veterinarios (Colonia Lomas Altas)	no	yes	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	/	/		x		
Morocco	1. Société de Productions Biologiques et Pharmaceutiques Vétérinaires BIOPHARMA (Rabat)	Botulism	yes	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	x	n.p.
	2. M.C.I. SANTE ANIMALE (Mohammedia)	Botulism, Anthrax	yes	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	x	n.p.
Myanmar	1. Vaccine Research Centre, Department of Medical Research (Yangon)	no	yes										x		x		n.p.
	2. Vaccine Production Division, LBVD (Yangon)	Anthrax	yes										x		x		n.p.
Netherlands	1. Wageningen Bioveterinary Research / former Central Veterinary Institute (Lelystad)	no	yes	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	x	x	x	x	x	/	/	/
	2. Intervet International B.V. /	no	yes	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	x	x	x	x	x	x	x	x

¹¹ No vaccines are produced in Lithuania (2020, p. 6)

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020
	MSD Animal Health (Boxmeer)																
	3. Nederlands Vaccin Instituut (Bilthoven)	no	yes							x	/	/	/	/	/	/	/
	4. WWY/WWP (Weesp)	no	yes							x	x	x	x	x	x	x	x
	5. Boehringer Ingelheim Animal Health Operation / former Merial Lelystad (Lelystad)	n.a.	yes							x	x	x	x	x	x	x	x
	6. Janssen Vaccines & Prevention / former Janssen/Crucell Holland B.V. (Leiden)	no	yes							/	x	x	x	x	x	x	x
	7. Erasmus Medical Center (Rotterdam)	no	yes							/	x	x	x	x	x	x	x
	8. Bilthoven Biologicals B.V. (Bilthoven)	no	yes							/	x	x	x	x	x	x	x
	9. Wacker Biotech B.V. / former SynCo Bio Partners B.V. (Amsterdam)	no	yes							/	/	/	/	x	x	x	x
	10. Patheon Biologicals (Groeningen)	no	yes							/	x	x	x	x	x	x	/
New Zealand	<i>Nothing to declare</i>	n.a.	n.a.	ND	ND	n.p.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Norway	1. Pharmaq (Overhalla)	no	yes		x		x	x	x	x	x	x	x	x	x	x	x
	2. The National Veterinary Institute (Oslo)	no	yes	n.p.	x	n.p.	x	x	x	x	x	NN	NN	NN	NN	NN	NN
	3. The Norwegian Institute of Public Health (Nydalen)	no	yes		x		x	x	x	x	x	x	x	x	x	x	x
Portugal	Genibet Biopharmaceuticals (Oeiras)	no	yes	n.p.	n.p.	n.p.	ND	x	x	ND	ND	NN	NN	ND	NN	NN	NN
Qatar	<i>Nothing to declare</i>	n.a.	n.a.		n.p.	n.p.	n.p.	n.p.	ND	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Republic of Moldova	<i>Nothing to declare¹²</i>	n.a.	n.a.			n.p.	n.p.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

¹² Currently there are no human vaccines manufactured and licensed in the Republic of Moldova (2020, p.10)

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	
Romania	1. The "Cantacuzino" National Medico-Military Institute for Research and Development (Bucharest)	no	yes	/	/	/	x		x	x	x	x	x	x	x	x	x	
	2. SC Pasteur - Filiala Filipesti Srl, working point Bucharest / former National Society "Pasteur Institute" S.A. (Bucharest)	no	yes	x	x	x	/	NN	x	x	x	x	x	x	x	x	x	
	3. S.C. Pasteur Filiala Filipesti S.R.L. (Prahova)	no	yes	/	/	/	/		/	x	x	/	/	/	/	/	/	
	4. ROMVAC COMPANY S.A. (Voluntari)	Anthrax	yes	/	/	/	/		/	x	x	x	x	x	/	/	x	x
Serbia	Institute of Immunology and Virology "Torlak" (Belgrad)	no	yes	n.p.		n.p.	n.p.	n.p.	x	n.p.	x	x	n.p.	x	x	x	x	
Slovakia	<i>Nothing to declare</i>	n.a.	n.a.															ND
Slovenia	<i>Nothing to declare</i>	n.a.	n.a.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	ND	ND	ND	ND	ND	ND	ND	ND
Sweden	1. Valneva Sweden AB / former Crucell Sweden AB / former SBL Vaccin AB, Solna (Stockholm)	no	yes	x	x	x	NN		x	NN	x	NN	NN	NN	NN	NN	NN	NN
	2. UniTech Biopharma (Matfors)	no	yes	x	x	x	NN	NN	/	NN	/	NN	NN	NN	NN	NN	NN	NN
	3. Cobra Biopharma (Matfors)	no	yes	/	/	/			x		/							
Switzerland	1. Janssen Vaccines, Branch of Cilag International GmbH / former Crucell Switzerland AG (Bern)	no	yes	/	/	/	x	x	x	x	x	/	x	x	x	x	x	x
	2. Cytos Biotechnology AG (Schlieren)	no	yes	/	/	/	x	x	x	x	/	/	/	/	/	/	/	/
	3. Pevion Biotech Ltd. (Ittingen)	no	yes	/	/	/	x	x	x	x	/	/	/	/	/	/	/	/
	4. EmergentBiosolutions Berna GmbH / former PaxVax Berna GmbH / former Crucell Switzerland AG (Thörishaus)	no	yes	/	/	/	x	x	x	x	x	x	x	x	x	x	x	x

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020
Thailand	1. The Government Pharmaceutical Organisation (Bangkok)	no	yes	x			x	x	x	n.p.	n.p.	n.p.	n.p.	n.p.			
	2. Merieux Biological Products Co., Ltd. (Chachoengsao)	no	yes	/			/	/	x	n.p.	n.p.	n.p.	n.p.	n.p.			
	3. Queen Saovabha Memorial Institute (Bangkok)	no	yes	/			/	/	x	n.p.	n.p.	n.p.	n.p.	n.p.			
	4. BioNet-Asia Co., Ltd. (Bangkok)	no	yes	/			/	/	x	n.p.	n.p.	n.p.	n.p.	n.p.			
	5. Bureau of Veterinary, Department of Livestock Development (Nakhon Ratchasima)	Anthrax	yes	/				/	/	x	n.p.	n.p.	n.p.	n.p.	n.p.		
Turkey	1. Konya Veterinary Control and Research Institute (Meram-Konya)	no	yes					x			/	/	/	/	/		
	2. Ministry of Food Agriculture and Livestock - Veterinary Control Institute / former Pendik Veterinary Control and Research Institute (Istanbul)	no	yes					x			x	x	x	x	x		
	3. Ministry of Food Agriculture and Livestock - Veterinary Control and Central Research Institute / former Anthrax Vaccine Production Laboratory & Production of Tuberculin and Mallein Laboratory (Ankara)	Anthrax	no				n.p.	x		NN	NN	x	x	x	x		
	4. Ministry of Food Agriculture and Livestock - Foot and Mouth Disease Institute (Ankara)	no	yes					/				x	x	x	x		
	6. Veterinary Control Institute (Samsun)	no	yes					/				x	x	x	x		
	7. VETAL Animal Health Products Company (Adiyaman)	no	yes					/				x	x	x	x		
			no	yes								x	x	x	x		

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020	
Ukraine	8. DOLLVET Veterinary Vaccine, Medicine and Biological Materials Production Company (Sanliurfa)	no	yes	/	/			/			x	x	/	x	x			
	9. ATAFEN Veterinary Materials Production Company (Is-mir)	no	yes	/	/			/			x	x	/	x	x			
	10. AKUAKIM Medical, Chemical, Pharmaceutical, Feed Additives and Water Products Industry and Trade Company (Manisa)	no	yes	/	/			/			x	x	/	/	/			
	1. Sumy Biofactory (Sumy)	Anthrax	yes	x	x			x	x	n.p.	x	x	x	x	x	x		
	2. Biofabrika Dnepropetrovsk (Dnepropetrovsk)	no	yes	x	x			x	x	n.p.	/	/	/	/	/	/		
	3. Kharkov Biofactory (Kharkov)	no	yes	x	x			x	x	n.p.	x	x	x	x	x	x		
	4. Kherson Biofactory (Kherson)	Anthrax	yes	x	x			x	x	n.p.	x	x	x	x	x	x		
	5. Novogaleshchinsky Biofactory (Kiev)	no	yes	x	x			x	x	n.p.	x	x	/	/	/	/		
	6. LLC "Ukrvetpromsnab" (Brovary)	no	yes	x	x			x	x	n.p.	x	x	x	x	x	x		
	7. Corporation "Ukrvetpromsnab" (Kiev)	no	yes	x	x			x	x	n.p.	x	x	/	/	/	/		
8. Scientific Center "Institute for Experimental and Clinical Veterinary Medicine" (Kharkov)	no	yes	x	x			x	x	n.p.	x	x	/	/	/	/			
9. Institute of Veterinary Medicine of the National Academy of Agrarian Science of Ukraine (Kiev)	no	yes	x	x			x	x	n.p.	x	x	/	/	/	/			
10. PJSC "PHARMSTANDART BIO-	no	yes	x	x			x	x	n.p.	x	x	x	x	x	x			

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	Decl. 2017	Decl. 2018	Decl. 2019	Decl. 2020
	LEC " (Kharkov)																
	11. LLC "PHARMEX GROUP" (Shevchenko)	no	yes					/	/			/	x	x	x	/	
	12. TOV "Pharma Life" (Lviv)	no	yes					x	/			/	x	x	x	/	
	13. Laboratory of leptospirosis with a museum of strains of microorganisms of the INM NAAS, laboratory of bacterial animal diseases (Kiev)	no	yes					/	/			/	/	x	x	x	
	14. PJSC Farmak (Kiev)	no	yes					x	/			/	x	x	x	/	
	1. Seqirus Vaccines Limited / former Novartis Vaccines and Diagnostics Limited (Liver-pool)	no	yes	x	x	x	x	x	/	x	x	x	x	x	x	x	x
	2. AstraZeneca Liverpool (registered in Companies House as MedImmune UK Ltd) (Liver-pool)	no	yes	/	/	/	/	/	/	/	/	/	/	/	/	/	x
United Kingdom	3. Porton Biopharma Limited / former Public Health England-Porton / former Health Protection Agency (Salisbury)	An-thrax	no	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	4. Merck BioReliance® Services (Glasgow) ¹³	no	yes	/	/	/	/	/	/	/	/	/	/	/	/	x	x
	5. Valneva Scotland Ltd (Livingston)	no	yes	/	/	/	/	/	/	/	/	/	/	/	/	x	x
	6. MedImmune UK Ltd (Liver-pool)	no	yes	x	x	x	x	x	x	x	x	x	x	x	x	/	/
USA	1. Emergent Biosolutions (Langston, MI)	An-thrax, Small-	no	n.p.	n.p.	n.p.	x	x	x	x	x	x	x	x	x	x	x

¹³ The facility produces the active viral ingredient for an Adenovirus vaccine Type 4 and Type 7 (2020, p. 41)

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		pox																
	2. MassBiologics (Boston, MA)	no	yes				x	x	x	x	x	x	x	x	x	x	x	x
	3. MedImmune, LLC (Gaithersburg, MD)	no	yes				x	x	x	x	x	x	/	/	/	/	/	/
	4. Merck Sharp & Dohme Corp (North Wales, PA)	no	yes				x	x	x	x	x	x	x	x	x	x	x	x
	5. Organon Teknika Corporation, LLC (Durham, NC)	no	yes				x	x	x	x	x	x	x	x	x	x	x	x
	6. MCM Vaccine Company/Sanofi Pasteur, Inc. (Swiftwater, PA)	no	yes				/	/	/	/	/	/	/	/	/	/	/	/
	7. Sanofi Pasteur Biologics Co. (Cambridge, MA)	Small-pox	yes				x	x	x	x	x	x	x	x	x	x	x	/
	8. Wyeth Pharmaceuticals, Inc (New York, NY)	no	yes				x	x	x	x	x	x	x	x	x	x	x	x
	9. Barr Laboratories, Inc. (Forest, VA)	no	yes				/	/	/	/	/	/	/	/	/	/	/	/
	10. Protein Sciences Corporation (Meriden, CT)	no	yes				/	/	/	/	/	/	/	/	/	/	/	/
	11. Sanofi Pasteur, Inc (Swiftwater, PA)	no	yes				x	x	x	x	x	x	x	x	x	x	x	x
	12. Seqirus Inc. (Holly Springs, NC)	no	yes				/	/	/	/	/	/	/	/	/	/	/	/

Research Group for Biological Arms Control

The aim of the Research Group is to contribute, through innovative research and outreach activities, to the universal prevention of biological weapons development, production and use. The focus of activities is twofold. Firstly, the Research Group contributes to preventing the erosion of the universal bioweapons prohibition by opposing norm-harming activities. Secondly, it develops new concepts and instruments for monitoring bioweapon relevant activities and for verifying and enforcing compliance with the norm against bioweapons.

Contact

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