Revised forms for the submission of the Confidence-Building Measures

Declaration form on Nothing to Declare or Nothing New to Declare for use in the information exchange

Measure	Nothing to declare	Nothing new to declare	Year of last declaration if nothing new to declare
A, part 1			
A, part 2 (i)			
A, part 2 (ii)			
A, part 2 (iii)			
B	X		
C			
E			
F	X		
G	X		

(Please mark the appropriate box(es) for each measure with a tick, and fill in the year of last declaration in the last column where applicable.)

Date: March 31, 2015_____

State Party to the Convention: Finland_____

Date of ratification/accession to the Convention: February 4, 1974_____

National point of contact: Hanna-Leena Korteniemi / MFA_____

Confidence-Building Measure "A"

Form A, part 1 (i)

No maximum containment laboratory exists in Finland.

Form A, part 1 (ii)

If no BSL4 facility is declared in Form A, part 1 (i), indicate the highest biosafety level implemented in facilities handling biological agents[1] on a State Party's territory:

Biosafety level 3[2]	**yes** / no
Biosafety level 2[3] (if applicable)	yes / no

Any additional relevant information as appropriate:

Additional information specific to each laboratory working with biological agents at BSL2/BSL3 level follows from these organisations: Centre for Biothreat Preparedness, National Institute of Health and Welfare (THL), University of Helsinki; *i*) Yersinia Research Laboratory, *ii*) Department of Virology, *iii*) Department of Food and Environmental Sciences, *iv*) *Clostridium botulinum* laboratory, Finnish Food Safety Authority (Evira) and Finnish Defence Research Agency (FDRA).

[1] Microorganisms pathogenic to humans and/or animals

[2] In accordance with the latest edition of the WHO Laboratory Biosafety Manual and/or the OIE Terrestrial Manual or other equivalent internationally accepted guidelines.

[3] In accordance with the latest edition of the WHO Laboratory Biosafety Manual and/or the OIE Terrestrial Manual or other equivalent internationally accepted guidelines.

Exchange of Data on Research Centres and Laboratories #1

1. **Name(s) of the Facility**
   Centre for Biothreat Preparedness

2. **Responsible public or private organization or company**
   Centre for Military Medicine, Finnish Defence Forces under the Ministry of Defence and the National Institute for Health and Welfare (THL) under Ministry of Social Affairs and Health.

3. **Location and postal address**
   Tukholmankatu 8 A, FI-00290 Helsinki and Mannerheimintie 166, FI-00300 Helsinki.

4. **Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence**
   The Centre is financed jointly by the Finnish Defence Forces and National Institute for Health and Welfare (THL).

5. **Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m2)**
   There are no BSL-4 units at the Centre.

6. **Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate**
   The Centre for Biothreat Preparedness started its activities in 2005. During 2014, the Centre developed rapid PCR detection assays for selected microbial agents.

If no BSL4 facility is declared in Form A, part 1 (i), indicate the highest biosafety level implemented in facilities handling biological agents[4] on a State Party's territory:

Biosafety level 3	**yes**

[4] Microorganisms pathogenic to humans and/or animals

Exchange of Data on Research Centres and Laboratories #2

1. **Name(s) of the Facility**
   National Institute for Health and Welfare (THL), bacteriological and virological laboratories.

2. **Responsible public or private organization or company**
   National Institute for Health and Welfare (THL) under Ministry of Social Affairs and Health.

3. **Location and postal address**
   Mannerheimintie 166, FI-00300 Helsinki

4. **Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence**
   Funding from the Ministry of Social Affairs and Health and large variety of external research funding.

5. **Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m2)**
   There are no BSL-4 laboratories or other units at this containment level.

6. **Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate**
   Clinical and environmental microbiological research and reference laboratory facilities in Helsinki, Turku, Kuopio and Oulu. Working mainly with ordinary occurring endemic and epidemic bacteria and viruses with main emphases on vaccine preventable diseases, enteric pathogens, zoonoses, *tuberculosis spp*, polioviruses, influenza (including 2009 pandemic influenza H1N1), coronaviruses, HIV, hepatitis viruses and environmental fungi and bacteria causing human health problems. The Institute manages regional influenza and polio laboratory facilities. The Institute is in charge of biothreat preparedness in public health context. National focal point for IHR started June 2007.

   If no BSL4 facility is declared in Form A, part 1 (i), indicate the highest biosafety level implemented in facilities handling biological agents[5] on a State Party's territory:

Biosafety level 3	**yes**

Any additional relevant information as appropriate:

Two BSL-3 level laboratories: 120m^2 in Helsinki and 80m^2 in Turku.

[5] Microorganisms pathogenic to humans and/or animals

Exchange of Data on Research Centres and Laboratories #3

1. **Name(s) of the Facility**
   Yersinia Research Laboratory

2. **Responsible public or private organization or company**
   University of Helsinki

3. **Location and postal address**
   Department of Bacteriology and Immunology
   Haartman Institute, University of Helsinki
   Haartmaninkatu 3
   P.O Box 21
   FI-00014 University of Helsinki
   Helsinki, Finland

   Yersinia-research home page: http://www.helsinki.fi/yersinia/

4. **Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence**
   Special state subsidy (EVO) for health science research in Finland, Centre for Military Medicine.

5. **Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m2)**
   No BSL-4 laboratories.

6. **Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate**
   The research is focused on genetics and biosynthesis of lipopolysaccharide (LPS) of *Yersinia pestis*, as well as on the role of LPS in virulence. Molecular evolution studies elucidate the relationships between the species of the genus *Yersinia*. Research work is also conducted on the identification of *Y. pestis* specific bacteriophage receptors.

   If no BSL4 facility is declared in Form A, part 1 (i), indicate the highest biosafety level implemented in facilities handling biological agents[6] on a State Party's territory:

Biosafety level 3	no
Biosafety level 2 (if applicable)	**yes**

[6] Microorganisms pathogenic to humans and/or animals

Exchange of Data on Research Centres and Laboratories #4:

1. **Name(s) of the research centre and/or laboratory**
   Department of Virology

2. **Responsible public or private organization or company**
   University of Helsinki

3. **Location and postal address**
   Dept of Virology
   P.O. Box 21
   00014 University of Helsinki

4. **Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence**
   In 2014 funding was received from Helsinki University Hospital EVO-fund, University of Helsinki, National Technology Agency of Finland, Academy of Finland, and Sigrid Jusélius Foundation.

5. **Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m2)**
   There are no BSL-4 laboratories.

6. **Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate**
   The Helsinki University Viral Zoonoses Group (HUVZG) conducts research on virology, cell biology, ecology and epidemiology of zoonotic viruses, especially hantaviruses and certain other rodent-borne and arboviruses occurring in Northern Europe. Typical viruses that we are growing are Puumala virus, tick-borne encephalitis virus and dengue viruses. The research group operates within the Faculty of Medicine, Department of Virology, and partially the Department of Veterinary Biosciences at the Veterinary Faculty. There is a BSL-3 facility in both faculties. The Viral Zoonoses group is connected to the diagnostic laboratory of viral zoonoses at HUSLAB, Helsinki. Principal investigators of the group are Alexander Plyusnin, Antti Vaheri and Olli Vapalahti.

   If no BSL4 facility is declared in Form A, part 1 (i), indicate the highest biosafety level implemented in facilities handling biological agents[7] on a State Party's territory:

Biosafety level 3	**yes**

[7] Microorganisms pathogenic to humans and/or animals

Exchange of Data on Research Centres and Laboratories #5

1. **Name(s) of the research centre and/or laboratory**
   Department of Food and Environmental Sciences

2. **Responsible public or private organization or company**
   University of Helsinki

3. **Location and postal address**
   Department of Food and Environmental Sciences
   P.O. Box 56 (Viikinkaari 9)
   00014 University of Helsinki

4. **Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence**
   The funding was received from EU FP7 via the "Integrated Chikungunya Research" consortium.

5. **Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m2)**
   There are no BSL-4 laboratories.

6. **Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate**
   The research group carries out alphavirus research at the Department of Food and Environmental Sciences, University of Helsinki. The research focuses on the alphavirus (Semliki Forest virus, Sindbis virus and Chikungunya virus) replication mechanisms and antiviral development. Small molecular-weight inhibitors are searched against Chikungunya virus. The Chikungunya virus research is conducted in the BSL-3 laboratory of the Veterinary Faculty in the Viikki campus.

   If no BSL4 facility is declared in Form A, part 1 (i), indicate the highest biosafety level implemented in facilities handling biological agents[8] on a State Party's territory:

Biosafety level 3	**yes**

[8] Microorganisms pathogenic to humans and/or animals

Exchange of Data on Research Centres and Laboratories #6

1. **Name(s) of the Facility**
   Clostridium botulinum laboratory

2. **Responsible public or private organization or company**
   University of Helsinki

3. **Location and postal address**
   Department of Food Hygiene and Environmental Health
   Faculty of Veterinary Medicine
   Agnes Sjöbergin katu 2
   P.O. Box 66
   00014 University of Helsinki, Finland

4. **Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence**
   The laboratory is financed by the University of Helsinki. External research funding is received from various sources, including the Academy of Finland, the Finnish Foundation for Veterinary Research, the Finnish Ministry of Agriculture and Forestry, and the Walter Ehrström Foundation. The laboratory is currently participating in the EU FP7 collaboration 'AntiBotABE' (2010-2015).

5. **Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m2)**
   No BSL-4 laboratories.

6. **Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate**
   Scientific research on the prevalence, epidemiology, genetic heterogeneity, and regulatory mechanisms in *Clostridium botulinum*. Diagnostic services for confirmation of suspected human botulism outbreaks and food safety testing.

If no BSL4 facility is declared in Form A, part 1 (i), indicate the highest biosafety level implemented in facilities handling biological agents[9] on a State Party's territory:

Biosafety level 3	no
Biosafety level 2 (if applicable)	**yes**

[9] Microorganisms pathogenic to humans and/or animals

Exchange of Data on Research Centres and Laboratories #7

1. **Name(s) of the Facility**
   Finnish Food Safety Authority (Evira)

2. **Responsible public or private organization or company**
   Finnish Food Safety Authority under the Ministry of Agriculture and Forestry

3. **Location and postal address**
   Mustialankatu 3
   FI-00790 Helsinki

4. **Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence**
   Financing from the Ministry of Agriculture and Forestry

5. **Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m2)**
   None

6. **Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate**
   Diagnostics, surveillance and reference laboratory activities of animal diseases, zoonotic agents and foodborne pathogens, for example rabies, avian influenza, swine influenza (including pandemic H1N1 in pigs), Newcastle disease, foot and mouth disease, classical swine fever, anthrax, tuberculosis, verotoxic *E. coli*.

   If no BSL4 facility is declared in Form A, part 1 (i), indicate the highest biosafety level implemented in facilities handling biological agents[10] on a State Party's territory:

Biosafety level 3	**yes**

[10] Microorganisms pathogenic to humans and/or animals

Exchange of Data on Research Centres and Laboratories #8

1. **Name(s) of the Facility**
   Finnish Defence Research Agency (FDRA)

2. **Responsible public or private organization or company**
   Finnish Defence Research Agency (FDRA), Finnish Defence Forces under the Ministry of Defence.

3. **Location and postal address**
   P.O. Box 5 (Paroistentie 20)
   FI-34111 Lakiala
   Finland

4. **Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence**
   Finnish Defence Forces

5. **Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m2)**
   No BSL-4 laboratories.

6. **Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate**
   The objective of the research work has been in the development of detection and identification methods for biological warfare agents; microbes and toxins. A deployable CBRN field laboratory participated in international military exercises. The BSL-3 level CBRN field laboratory was operated as BSL-2 containment facility during 2014.

   If no BSL4 facility is declared in Form A, part 1 (i), indicate the highest biosafety level implemented in facilities handling biological agents[11] on a State Party's territory:

Biosafety level 3	yes

[11] Microorganisms pathogenic to humans and/or animals

Part 2 Exchange of information on national biological defence research and development programmes

Form A, part 2 (i)

National biological defence research and development programmes Declaration

Are there any national programmes to conduct biological defence research and development within the territory of the State Party, under its jurisdiction or control anywhere? Activities of such programmes would include prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

yes / no

If the answer is Yes, complete Form A, part 2 (ii) which will provide a description of each programme.

Form A, part 2 (ii, iii)

National biological defence research and development programmes

The Finnish Strategy to Secure Vital Functions of Society (2003 and 2006), as well as The Security Strategy for Society (2010) have defined vital functions of Finnish society and established targets and development policies that guide each administrative branch of the government in dealing with its strategic tasks. These strategies called for co-operation between each government sector in combating against new threats towards society. According to the Government Reports on Finnish Security and Defence Policy of 2004 and 2009, terrorism and epidemics caused by infectious diseases were listed as key threats affecting national security.

Based on the above resolutions The Centre for Biothreat Preparedness started operations in Helsinki in May 2005. The Centre combines Finnish scientific and laboratory knowhow on biological defence, as well as on biothreat assessment and preparedness. The Centre has actively seeked domestic and international collaboration, especially in the field of rapid detection and identification methodologies of selected biological agents. The Centre is composed of two units: the Biological Defence Unit of the Finnish Defence Forces, and the Department of Infectious Diseases at the National Institute of Health and Welfare (THL). Scientific work is carried out at a biological safety level 3 laboratory at the THL facilities. In addition, the Centre functions within the Biomedicum Helsinki Institute, where work is carried out in close contact with the Research and Development Department of the Centre for Military Medicine.

Confidence-Building Measure "B"

Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins

Form B

Information on outbreaks of infectious diseases and similar occurrences, that seem to deviate from the normal pattern[12]

No unusual human or animal disease outbreaks were detected.

[12] See paragraph 2 of the chapeau to Confidence-Building Measure B.

Confidence-Building Measure "C"

Encouragement of publication of results and promotion of use of knowledge

Arilahti V, Mäkelä SM, Tynell J, Julkunen I, Österlund P. 2014. Novel avian influenza A (H7N9) virus induces impaired IFN responses in human dendritic cells. PLOS ONE: 9(5): e96350. doi: 10.1371/journal.pone.0096350

Charbonnel N, Pagès M, Sironen T, Henttonen H, Vapalahti O, Mustonen J, Vaheri A. 2014. Immunogenetic factors affecting susceptibility of humans and rodents to hantaviruses and the clinical course of hantaviral disease in humans. Viruses. 6(5):2214-2241. doi: 10.3390/v6052214.

Dahlsten E, Isokallio M, Somervuo P, Lindström M, Korkeala H. 2014. Transcriptomic analysis of (group I) *Clostridium botulinum* ATCC 3502 cold shock response. PLoS One. 9(2):e89958. doi: 10.1371/journal.pone.0089958.

Dahlsten E, Lindström M, Korkeala H. 2014. Mechanisms of food processing and storage-related stress tolerance in *Clostridium botulinum*. Res Microbiol. pii: S0923-2508(14)00191-0. doi: 10.1016/j.resmic.2014.09.011.

Dahlsten E, Zhang Z, Somervuo P, Minton NP, Lindström M, Korkeala H. 2014.The cold-induced two-component system CBO0366/CBO0365 regulates metabolic pathways with novel roles in group I *Clostridium botulinum* ATCC 3502 cold tolerance. Appl Environ Microbiol. 80(1):306-319. doi: 10.1128/AEM.03173-13.

Derman Y, Korkeala H, Salo E, Lönnqvist T, Saxen H, Lindström M. 2014. Infant botulism with prolonged faecal excretion of botulinum neurotoxin and *Clostridium botulinum* for 7 months. Epidemiol Infect. 142(2):335-339. doi:10.1017/S0950268813001258.

Forbes KM, Voutilainen L, Jääskeläinen A, Sironen T, Kinnunen PM, Stuart P, Vapalahti O, Henttonen H, Huitu O. 2014. Serological survey of rodent-borne viruses in Finnish field voles. Vector Borne Zoonotic Dis. 14(4):278-283. doi: 10.1089/vbz.2013.1526.

Balasubramaniam S, Lyamin N, Kleyko D, Skurnik M, Vinel A, Y. Koucheryavy. 2014. Exploiting Bacterial Properties for Multi-hop Nanonetworks. IEEE Communications Magazine 52: 184-191.

Hepojoki J, Strandin TM, Hetzel U, Sironen T, Klingström J, Sane J, Mäkelä S, Mustonen J, Meri S, Lundkvist A, Vapalahti O, Lankinen HM, Vaheri A. 2014. Acute Hantavirus Infection Induces Galectin-3 Binding Protein. J Gen Virol. 95:2356-2364. doi: 10.1099/vir.0.066837-0.

Ho DK, Skurnik M, Blom AM, Meri S. 2014. *Yersinia pestis* Ail recruitment of C4b-binding protein leads to factor I-mediated inactivation of covalently and noncovalently bound C4b. Eur J Immunol. 44(3):742-751.

Jääskeläinen AJ, Kallio-Kokko H, Ozkul A, Bodur H, Kurokluoglu G, Mousavi M, Pranav P, Vaheri A, Mirazimi A, Vapalahti O. 2014. Development and evaluation of a real-time

RT-qPCR for detection of Crimean-Congo hemorrhagic fever virus representing different genotypes. Vector-Borne Zoon Dis. 14(12):870-872. doi: 10.1089/vbz.2014.1577.

Kirk DG, Palonen E, Korkeala H, Lindström M. 2014. Evaluation of normalization reference genes for RT-qPCR analysis of spo0A and four sporulation sigma factor genes in *Clostridium botulinum* Group I strain ATCC 3502. Anaerobe. 26:14-9. doi: 10.1016/j.anaerobe.2013.12.003.

Kirk DG, Zhang Z, Korkeala H, Lindström M. 2014. Alternative sigma factors SigF, SigE, and SigG are essential for sporulation in *Clostridium botulinum* ATCC 3502. Appl Environ Microbiol. 80(16):5141-5150. doi: 10.1128/AEM.01015-14.

Kuivanen S, Hepojoki J, Vene S, Vaheri A, Vapalahti O. 2014. Identification of linear human B-cell epitopes of tick-borne encephalitis virus. Virol J. 11:115. doi: 10.1186/1743-422X-11-115.

Korhonen EM, Huhtamo E, Virtala A-M, Kantele A, Vapalahti O. 2014. Approach to non-invasive sampling in dengue diagnostics: exploring virus and NS1 antigen detection in saliva and urine of travelers with dengue. J Clin Virol. 61(3):353-358. doi: 10.1016/j.jcv.2014.08.021.

Levanov L, Kuivanen S, Matveev A, Swaminathan S, Jääskeläinen-Hakala A, Vapalahti O. 2014. Diagnostic potential and antigenic properties of recombinant tick-borne encephalitis virus subviral particles expressed in mammalian cells from Semliki Forest virus replicons. J Clin Microbiol. 52(3):814-822. doi: 10.1128/JCM.02488-13

Lindh E, Ek-Kommonen C, Väänänen VM, Vaheri A, Vapalahti O, Huovilainen A. 2014. Molecular epidemiology of H9N2 influenza viruses in Northern Europe. Vet Microbiol. 172(3-4):548-554.

Ling J, Sironen T, Voutilainen L, Hepojoki S, Niemimaa J, Isoviita VM, Vaheri A, Henttonen H, Vapalahti O. 2014. Hantaviruses in Finnish soricomorphs: Evidence for two distinct hantaviruses carried by Sorex araneus suggesting ancient host-switch. Infect Genet Evol. 27:51-61. doi: 10.1016/j.meegid.2014.06.023.

Mascher G, Derman Y, Kirk DG, Palonen E, Lindström M, Korkeala H. 2014. The CLO3403/CLO3404 two-component system of *Clostridium botulinum* E1 Beluga is important for cold shock response and growth at low temperatures. Appl Environ Microbiol. 80(1):399-407. doi: 10.1128/AEM.03204-13.

Nordgren H, Aaltonen K, Sironen T, Kinnunen PM, Kivistö I, Raunio-Saarnisto M, Moisander-Jylhä AM, Korpela J, Kokkonen UM, Hetzel U, Sukura A, Vapalahti O. 2014. Characterization of a new epidemic necrotic pyoderma in fur animals and its association with *Arcanobacterium phocae* infection. PLoS One. 9(10):e110210. doi: 10.1371/journal.pone.0110210.

Pérez Vera C, Kapiainen S, Junnikkala S, Aaltonen K, Spillmann T, Vapalahti O. 2014. Survey of selected tick-borne diseases in dogs in Finland. Parasit Vectors. 7(1):285. doi: 10.1186/1756-3305-7-285.

Putkuri N, Kurkela S, Levanov L, Huhtamo E, Vaheri A, Sironen T, Vapalahti O. 2014. Isolation and characterization of a California encephalitis serogroup orthobunyavirus from Finnish mosquitoes. Infect Genet Evol. 22:164-173. doi: 10.1016/j.meegid.2014.01.023.

Rajaniemi SM, Hautala N, Sironen T, Vainio O, Vapalahti O, Vaheri A, Vuolteenaho O, Ruskoaho H, Kauma H, Hautala T. 2014. Plasma B-type natriuretic peptide (BNP) in acute Puumala hantavirus infection. Ann Med. 46(1):38-43. doi: 10.3109/07853890.2013.862960.

Reuter S, Connor TR, Barquist L, Walker D, Feltwell T, Harris SR, Fookes M, Hall ME, Petty NK, Fuchs TM, Corander J, Dufour M, Ringwood T, Savin C, Bouchier C, Martin L, Miettinen M, Shubin M, Riehm JM, Laukkanen-Ninios R, Sihvonen LM, Siitonen A, Skurnik M, Falcão JP, Fukushima H, Scholz HC, Prentice MB, Wren BW, Parkhill J, Carniel E, Achtman M, McNally A, Thomson NR. 2014. Parallel independent evolution of pathogenicity within the genus *Yersinia*. PNAS 111(18):6768-6773. doi: 10.1073/pnas.1317161111.

Rossow H, Forbes KM, Tarkka E, Kinnunen PM, Hemmilä H, Huitu O, Nikkari S, Henttonen H, Kipar A, Vapalahti O. 2014. Experimental infection of voles with *Francisella tularensis* indicates their amplification role in tularemia outbreaks. PLoS One. 9(10):e108864. doi: 10.1371/journal.pone.0108864.

Rossow H, Sissonen S, Koskela KA, Kinnunen PM, Hemmilä H, Niemimaa J, Huitu O, Kuusi M, Vapalahti O, Henttonen H, Nikkari S. 2014. Detection of *Francisella tularensis* in voles in Finland. Vector Borne Zoonotic Dis. 14(3):193-198. doi: 10.1089/vbz.2012.1255.

Rossow H, Ollgren J, Klemets P, Pietarinen I, Saikku J, Pekkanen E, Nikkari S, Syrjälä H, Kuusi M, Nuorti JP. 2014. Risk factors for pneumonic and ulceroglandular tularaemia in Finland: a population-based case-control study. Epidemiol Infect. 142(10):2207-2216. doi: 10.1017/S0950268813002999.

Simon G, Larsen LE, Dürrwald R, Foni E, Harder T, Van Reeth K, Markowska-Daniel I, Reid SM, Dan A, Maldonado J, Huovilainen A, Billinis C, Davidson I, Agüero M, Vila T, Hervé S, Breum SØ, Chiapponi C, Urbaniak K, Kyriakis CS, ESNIP3 consortium, Brown IH, Loeffen W. 2014. European surveillance network for influenza in pigs: surveillance programs, diagnostic tools and swine influenza virus subtypes identified in 14 European countries from 2010 to 2013. PLoS One. 9(12):e115815. doi: 10.1371/journal.pone.0115815.

Smit PW, Haanperä M, Rantala P, Couvin D, Lyytikäinen O, Rastogi N, Ruutu P, Soini H. 2014. Genotypic characterization and historical perspective of *Mycobacterium tuberculosis* among older and younger Finns, 2008-2011. Clin Microbiol Infect. 20(11):1134-1139 doi: 10.1111/1469-0691.12725

Vaheri A, Strandin T, Jääskeläinen AJ, Vapalahti O, Jarva H, Lokki ML, Antonen J, Leppänen I, Mäkelä S, Meri S, Mustonen J. 2014. Pathophysiology of a severe case of Puumala hantavirus infection successfully treated with bradykinin receptor antagonist icatibant. Antiviral Res. 111:23-25. doi: 10.1016/j.antiviral.2014.08.007.

van der Werf M, Ködmön C, Katalinic-Jankovic V, Kummik T, Soini H, Richter E, Papaventis D, Tortoli E, Perrin M, van Soolingen D, Zolnir-Dovc M, Östergaard-Thomsen V. 2014. Inventory study of non-tuberculous mycobacteria in the European Union. BMC Infect Dis. 14:62. doi: 10.1186/1471-2334-14-62.

Westenius V, Mäkelä SM, Ziegler T, Julkunen I, Österlund P. 2014. Efficient replication and strong induction of innate immune responses by H9N2 avian influenza virus in human dendritic cells. Virol 471-473:38-48. doi: 10.1016/j.virol.2014.10.002.

Zhang Z, Dahlsten E, Korkeala H, Lindström M. 2014. Positive regulation of botulinum neurotoxin gene expression by CodY in *Clostridium botulinum* ATCC 3502. Appl Environ Microbiol. 80(24):7651-7658. doi: 10.1128/AEM.02838-14.

Confidence-Building Measure "E"

Form E

Declaration of legislation, regulations and other measures

Relating to	Legislation	Regulations	Other measures[13]	Amended since last year
(a) Development, production stockpiling, acquisition or retention of microbial or other biological agents, or toxins, weapons, equipment and means of delivery specified in Article I	[Yes]/No	[Yes]/No	[Yes]/No	Yes/[No]
(b) Exports of micro-organisms[14] and toxins	[Yes]/No	[Yes]/No	[Yes]/No	Yes/[No]
(c) Imports of micro-organisms[11] and toxins	[Yes]/No	[Yes]/No	[Yes]/No	Yes/[No]
(d) Biosafety[15] and biosecurity[16]	[Yes]/No	[Yes]/No	Yes/[No]	Yes/[No]

Additional information to form E

Finland's legislation on biological weapons is based on the Biological Weapons Act 257/1975 and Decree 258/1975. Corresponding penal provisions were included in the Penal Code, chapter 11, section 7 b (Breach of the prohibition of biological weapons), with amendment 17/2003. Penal Code (39/1889) chapter 11, section 1 (War Crime), chapter 5, section 3 (Complicity in an offence) and section 6 (Abetting), chapter 34, sections 4 (Health endangerment) and 5 (Aggravated health endangerment), and chapter 34 a (Terrorist offences) are also applicable.

[13] Including guidelines.

[14] Micro-organisms pathogenic to man, animals and plants in accordance with the Convention.

[15] In accordance with the latest version of the WHO Laboratory Biosafety Manual or equivalent national or international guidance.

[16] In accordance with the latest version of the WHO Laboratory Biosecurity Guidance or equivalent national or international guidance.

Exports of micro-organisms and toxins are regulated by the Act on the Control of Export of Dual-Use Goods (562/1996, as amended by Acts 891/2000, 884/2001 and 581/2003), Government Decree on the Control of Export of Dual-Use Goods (924/2000 as amended by Decree 924/2000) and EC Council Regulation 1334/2000. Corresponding penal provisions were incorporated in the Penal Code (39/1889), chapter 46, sections 1-3 by Acts 769/1990, 1522/1994 and 706/1997. Since 2003, the authority responsible for export controls of micro-organisms and toxins is the Ministry for Foreign Affairs (Export Control Unit).

Exports of biological toxic agents "adapted for use in war" and related equipment, components and materials as listed in the EU Common Military List are regulated by the Act on the Export of Defence Materiel (282/2012). The authority responsible for export controls of the above mentioned biological toxic agents and related equipment, component and materials is the Ministry of Defence.

Imports of micro-organisms and toxins are regulated by the Biological Weapons Act 257/1975 and Decree 258/1975. Transports of micro-organisms and toxins are also regulated by the EC Council Directives 94/55/EEC and 96/49/EEC, the Communicable Diseases Act 583/1986 (as amended), section 33; Communicable Diseases Decree 786/1986 (as amended); Act on the Transport of Dangerous Goods (719/1994 as amended) and related decrees, Act on Protecting Plant Health (702/2003), section 7, and related decrees, Act on Animal Diseases (55/1980 as amended) and related decrees, Act on Veterinary Border Control (1192/1996 as amended) and related decrees. The corresponding penal provisions are included in the Penal Code (39/1889 as amended), chapter 44, section 2 (Health protection violation), chapter 44, section 13 (Transport of dangerous substances offence) and chapter 46, section 4 (Smuggling).

Biosafety is regulated by the Occupational Safety and Health Act (738/2002), as amended by the Government Decision for Protecting Employees from Work-related Threat Caused by Biological Agents (1155/1993), and Decision of the Ministry of Social Affairs and Health on the Classification of Biological Agents (921/2010). Furthermore, regulations concerning biosafety are included in the Communicable Diseases Act (583/1986) and Decree (786/1986), as well as Gene Technology Act (377/1995) and Government Decree on Gene Technology (928/2004). These biosafety regulations partly overlap with biosecurity; no specific biosecurity legislation exists.

Confidence-Building Measure "F"

Form F

Declaration of past activities in offensive and/or defensive biological research and development programmes

Nothing to declare.

Confidence-Building Measure "G"

Form G

Declaration of vaccine production facilities

There are no vaccine production facilities in Finland.