



Final Contaminant Candidate List 3 Microbes: Screening to the PCCL

Office of Water (4607M)
EPA 815-R-09-0005
August 2009
www.epa.gov/safewater

Contents

Abbreviations and Acronyms	2
1.0 Background and Scope	3
2.0 Recommendations for Screening a Universe of Drinking Water Contaminants to Produce a PCCL.....	3
3.0 Definition of Screening Criteria and Rationale for Their Application	5
3.1 Application of Screening Criteria to the Microbial CCL Universe	8
4.0 Additional Screening Criteria Considered.....	9
4.1 Organism Covered by Existing Regulations	9
4.1.1 Organisms Covered by Fecal Indicator Monitoring	9
4.1.2 Organisms Covered by Treatment Technique	10
5.0 Data Sources Used for Screening the Microbial CCL 3 Universe	11
6.0 Summary	12
7.0 References.....	13
Attachment A: Screening to the PCCL.....	A1

Exhibits

Exhibit 1. Summary of Screening Microbial CCL 3 Universe.....	9
---	---

Abbreviations and Acronyms

AWWARF - American Water Works Association Research Foundation

CCL - Contaminant Candidate List

CCL 1 - EPA's First Contaminant Candidate List

CCL 2 - EPA's Second Contaminant Candidate List

CCL 3 - EPA's Third Contaminant Candidate List

CCLP - Contaminant Candidate List Classification Process

EPA - Environmental Protection Agency

MCLG - Maximum Contaminant Level Goal

NDWAC - National Drinking Water Advisory Council

NRC - National Research Council

PCCL - Preliminary Contaminant Candidate List

Contaminant Candidate List 3 Microbes: Screening to the PCCL

1.0 Background and Scope

EPA is including twelve pathogens on the final Candidate Contaminant List 3 (CCL 3), one more than the eleven pathogens on the draft CCL 3. The Agency is adding Adenovirus, Enterovirus, and *Mycobacterium avium*, and is removing *Vibrio cholerae* and *Entamoeba histolytica* from the final CCL 3 (See Exhibit 1).

The protocol EPA used to select the microbial contaminants for the Draft CCL 3 is described in detail in the February 21, 2008, notice (73 FR 9631, 9644; USEPA, 2008a). Except for a minor change in the scoring step of the microbial CCL 3 process, (see the *Final CCL 3 Microbes: PCCL to CCL Process*) the protocol for selecting pathogens for the final CCL 3 remains the same as the protocol for the Draft CCL 3. Specifically, this step of the process for screening the universe is unchanged from the Draft CCL 3.

The document titled, *Final CCL 3 Microbes: Identifying the Universe* (USEPA, 2009) provides a summary of the statutory and regulatory background leading to development of a microbial Contaminant Candidate List (CCL) and the subsequent activities to develop a microbial CCL 3 universe as the initial step in a transparent and scientifically sound Contaminant Candidate List Classification Process (CCLCP).

This document summarizes criteria that the Environmental Protection Agency (EPA) uses for screening a universe of microbiological contaminants to identify those contaminants in the microbial CCL 3 universe to be placed on a Preliminary Contaminant Candidate List (PCCL). These criteria were developed in part following the recommendations of the National Research Council (NRC), the National Drinking Water Advisory Council (NDWAC) workgroup on the CCL process. The recommended screening process was reviewed by a panel of external experts, and the screening process described herein was derived from the subsequent deliberations of the EPA microbiology workgroup based upon the expert panel report.

2.0 Recommendations for Screening a Universe of Drinking Water Contaminants to Produce a PCCL

The NRC recommendations for a CCLCP are described in, *Classifying Drinking Water Contaminants for Regulatory Consideration* (NRC, 2001). The NRC workgroup identified a hierarchical framework for evaluating the potential occurrence of microbial contaminants in drinking water. This approach suggested that EPA could obtain data on microbial contaminant occurrence from existing occurrence databases and lists. Microbes with demonstrated or potential occurrence in drinking water, and microbes with demonstrated or potential ability to cause adverse health effects from drinking water exposure were recommended for inclusion in a PCCL.

The NRC workgroup report did not contain specific recommendations for selection and screening of microbial contaminants to a PCCL, and because occurrence data are not readily available to support the screening process envisioned by the NRC workgroup, the Agency requested further study of these issues by a workgroup convened by the NDWAC. NDWAC recommended selecting microbial contaminants for a PCCL based upon an assessment of occurrence attributes and health effects attributes relating to the plausibility of pathogen presence, survival, and transport through drinking water resulting in disease manifestations from drinking water exposure. These recommendations are described further in, *National Drinking Water Advisory Council Report on the CCL Classification Process* (NDWAC, 2004).

The microbial CCL 3 universe was defined by the NDWAC workgroup as microbes that are known to cause disease in humans. A literature review identified a list of 1,415 known human pathogens including bacterial, viral, protozoan, helminth, and fungal pathogens (Taylor et al., 2001). The Taylor list was recommended as the basis of the microbial CCL 3 universe. EPA requested nominations from the scientific community for additions to the microbial CCL 3 universe, and four microbes were added to the list through the nomination process (USEPA, 2006). EPA also added 6 fungi that did not appear on the list of Taylor et al. (2001) but were identified in drinking water distribution systems. EPA also added one virus that was identified as an emerging pathogen of potential interest, thus bringing the total number of microbes in the CCL 3 universe to 1,425 pathogens.

Selection of microbes from the CCL 3 Universe for placement on the PCCL is based upon screening criteria that assess the potential of water-related transmission (occurrence) and the plausibility of causing waterborne disease by ingestion, inhalation, or dermal contact (health effects). NDWAC recommended ten screening criteria for initial screening of pathogens in the microbial CCL universe for placement on a PCCL. NDWAC also suggested that supplementing these screening criteria may be necessary to insure that microbes on a PCCL represent only those pathogens whose occurrence and health effects are attributable to drinking water. The principles supporting supplemental screening criteria include:

- biological characteristics related to occurrence and survival
- taxonomic consolidations of genera or species by designating a representative genus/species, i.e. allowing the designated type species of a pathogen to represent the genus for screening purposes
- reliance upon epidemiological data to determine potential of adverse health effects attributable to a drinking water source

The NDWAC workgroup evaluated the possibility of using virulence factor activity relationships (VFARs) as a means of identifying potential waterborne pathogens. The workgroup concluded that additional studies were necessary before VFARs could be used to screen microbes to a PCCL (NDWAC 2004).

EPA restricted the PCCL to pathogens that are known to be associated with source water, and recreational water only if the water is also drinking water (e.g., swimming pools) are considered as candidates for the PCCL. Screening criteria are used to exclude those pathogens

whose biological properties are incompatible with water transmission by ingestion, inhalation or dermal contact, and those pathogens that are typically introduced from sources other than drinking water.

3.0 Definition of Screening Criteria and Rationale for Their Application

Screening criteria were developed based upon epidemiology, geographical distribution, and biological properties in the host and in the environment. Screening criteria recommended by NDWAC, as amended by the EPA microbiology workgroup following external peer review, are listed below. Only one criterion is needed to screen out a pathogen. All pathogens that are not excluded under any screening criteria are moved to the PCCL. However, any pathogen documented to cause disease transmitted through drinking water, regardless of the following screening criteria, is considered for the PCCL.

Criterion 1:

Anaerobes (microorganisms that cannot survive in oxygenated environments)

Anaerobes are microorganisms that cannot survive in the presence of oxygen (Murray et al., 2007). Because of oxygen toxicity, they are unable to survive in the ambient water environment, and they pose negligible threat to human health from drinking water exposure. Examples of anaerobes that are screened out based on this screening criterion include members of the bacterial genera *Actinomyces*, *Bacteroides*, *Clostridium*, *Eubacterium*, *Fusobacterium*, and *Prevotella*, among others (Murray et al., 2007).

Criterion 2:

Fastidious or obligate intracellular pathogens (environmental survival in water implausible)

Fastidious or obligate intracellular pathogens rely upon their host to provide essential nutrients and growth factors that are not present in the environment, hence these pathogens cannot survive outside their hosts. Many fastidious or obligate intracellular pathogens have a narrow temperature and pH range as a result of host adaptation, and they cannot survive the wide range of temperatures and pH common in the ambient environment. Examples of fastidious or obligate intracellular pathogens that are screened out include members of the genera *Chlamydophila*, *Mycoplasma*, and *Orientia* (Murray et al., 2007). This criterion is applied only to bacteria, since all viruses are obligate intracellular pathogens (Knipe and Howley, 2007).

Criterion 3:

Pathogens exclusively transmitted by direct or indirect contact with blood or body fluids (including sexually transmitted diseases)

Some pathogens are transmitted by direct or indirect contact with blood or body fluids, where fecal-oral transmission or transmission by aerosolized water is not observed (Mandel et al. 2005). Pathogens causing bloodborne diseases and sexually transmitted diseases are highly host adapted, fastidious, and are usually not present in feces. They do not survive under environmental conditions, and they are not transmitted by the fecal-oral route, either by direct

contact with feces or indirect contact with contaminated drinking water. Examples of pathogens transmitted by blood or body fluids include the etiologic agents of gonorrhea and syphilis, *Chlamydia*, herpes virus, human immunodeficiency virus, and hepatitis virus B, C, D and G (Murray et al., 2007).

Criterion 4:

Pathogens transmitted by vectors

Vectors include arthropods and rodents (Acha and Szyfres, 2001). Pathogens transmitted by vectors depend upon either insect or other bites, or close contact with rodents, and these pathogens are not transmitted by contact with drinking water. Mosquitoes, ticks, and fleas are the most common vectors of arthropod-borne diseases (Krauss, et al., 2003). Examples of vector-borne pathogens include bacteria, viruses, protozoa, and helminths. The genera *Babesia*, *Borrelia*, *Brugia*, *Dirofilaria*, *Ehrlichia*, *Leishmania*, *Plasmodium*, *Trypanosoma*, *Rickettsia*, and all arthropod-borne viruses were not moved to the PCCL (Murray et al., 2007).

Criterion 5:

Microflora indigenous to the gastrointestinal tract, skin and mucous membranes

The human body is colonized with a rich and commensal microflora (Finegold et al., 1983; Drasar and Barrow, 1985; Isenberg and D'Amato, 1995). Some microbes that colonize the human body are transitory, while others are part of the continuing normal flora of the body. Microbes comprising normal flora have a characteristic ecological niche, but sometimes conditions permit their access to areas of the body where they may exhibit pathogenic potential resulting in infection and disease. Infections with normally innocuous microbes are called opportunistic infections, because of their ability to exploit host conditions that may periodically predispose them to disease. Because exposure to normal flora microbes is continuous throughout life, and because the populations of normal flora microbes exceed the number of these microbes present in drinking water by many orders of magnitude, drinking water represents an improbable source of infection and disease. Examples of normal flora include members of the genera *Capnocytophaga*, *Corynebacterium*, *Staphylococcus*, *Streptococcus*, and several yeasts (Murray et al., 2007).

Criterion 6:

Pathogens transmitted solely by respiratory secretions

Pathogens causing respiratory disease are typically transmitted by direct contact with respiratory secretions, either by inhalation of aerosols, by direct person-to-person contact, or by contact with fomites. Drinking water is an unlikely mode of transmission because the number of pathogens in respiratory secretions and the continuity of exposure to respiratory secretions far exceed exposure through drinking water (Bennet and Brachman, 1998). Examples of pathogens transmitted by respiratory secretions include the etiologic agents of tuberculosis, diphtheria, whooping cough, measles, rubella, and influenza (Knipe and Howley, 2007; Murray et al., 2007; Mandel et al., 2005).

Criterion 7:

Pathogens whose life cycle is incompatible with drinking water transmission

Some pathogens, such as helminths, require intermediate hosts to complete their life cycles, and incidental infection of humans results in an interruption of their life cycle with subsequent death of the pathogen (Acha and Szyfres, 2001). Some pathogens are adapted to a single route of transmission such as rabies virus, which is transmitted by animal bites. Some pathogens are specifically adapted to survive in a unique ecological niche, and they cannot withstand any alteration of conditions to which they are adapted. For example, rabies virus, *Dientamoeba fragilis*, *Enterobius vermicularis*, and many helminths remain in the microbial CCL 3 universe and are not considered for the PCCL based on this criterion (Murray et al., 2007; Ashford and Crewe, 2003).

Criterion 8:

Pathogens where drinking water-related transmission is not implicated

Some pathogens cause such rare occurrences of disease that only a few cases have been reported in medical literature, and these rare occurrences of disease present limited opportunity to protect public health from drinking water exposure (Acha and Szyfres, 2001; Knipe and Howley, 2007; Murray et al., 2007; Mandel et al., 2005). Some pathogens are associated with direct transmission from animals to humans, or other transmission routes that do not involve drinking water (Acha and Szyfres, 2001; Krauss et al, 2003; Howard, 2003). Examples of pathogens that remain in the microbial CCL 3 universe after application of this criterion are *Leptospira*, *Listeria*, *Nosema*, and the etiologic agents of several zoonotic virus infections (Knipe and Howley, 2007; Murray et al., 2007).

Criterion 9

Natural habitat is in the environment without epidemiological evidence of drinking water-related disease

The environment is teeming with microorganisms, at varying concentrations, and humans are in constant contact with these microorganisms throughout their lives (Bennett and Brachman, 1998; Isenberg and D'Amato, 1995). Microorganisms naturally present in the environment are not considered a threat to public health as a result of drinking water exposure unless epidemiological evidence demonstrates a potential for water-related disease. Thus, outbreaks occurring in nosocomial settings or attributable to recreational water resulting from post-delivery contamination of drinking water are not sufficient to place a microorganism on the PCCL unless the drinking water system was shown to be contaminated (Wenzel, 2003). *Acinetobacter*, *Gordonia*, *Nocardia*, *Pseudomonas*, and most fungi are excluded from the PCCL based on this criterion (Murray et al., 2007; Howard, 2003).

Criterion 10

Pathogens not endemic to North America

Some pathogens have an exclusive geographical distribution, and they are not naturally present in North America (Ashford and Crewe, 2003; Murray et al., 2007; Palmer et al., 1998). Only pathogens endemic to North America have the potential to contaminate drinking water in the U.S. Several helminths such as most *Diphyllobothrium*, and *Paragonimus* species and several viruses such as the hemorrhagic fever viruses and poxviruses would remain in the microbial CCL universe after application of this criterion.

Criterion 11

A genus and species or serotype may be chosen to represent a group of closely related organisms

EPA has chosen a few pathogens to represent a group based on all serotypes within a group sharing essential biological properties in common with the group. Designation of a representative group provides adequate protection of public health under the CCLCP (Murray et al., 2007). Pathogens that represent other pathogens in their group are the following: *Arcobacter butzleri*, *Campylobacter jejuni*, *Helicobacter pylori*, *Legionella pneumophila*, *Salmonella enterica*, *Shigella sonnei*, Adenovirus, Astrovirus, Enterovirus, Microsporidia, and *Entamoeba histolytica*.

Criterion 12

Current taxonomy does not support the classification listed by Taylor et al. (2001).

Microbial taxonomy and nomenclature is a dynamic science, and taxonomic classifications are constantly changing. Original taxonomic classifications were based upon the phenotypic characteristics of microorganisms, but these classifications are being revised as genotypic information becomes available. New genera are formed, sometimes prematurely, based upon partial genomic data, and taxonomists do not always agree with proposed changes. Under this criterion, the genera *Fluoribacter* and *Tatlockia* are combined with the genus *Legionella* for screening purposes (Murray et al., 2007).

3.1 Application of Screening Criteria to the Microbial CCL Universe

Bacteria, viruses, protozoa, helminths, and fungi in the CCL 3 Universe are shown respectively in the tables of Attachment A, and *CCL 3 Microbes: Identifying the Universe*. Each table identifies the pathogens in each category and indicates which screening criteria were applied to remove pathogens from further consideration in the CCL Process. Those pathogens not excluded by at least 1 of the 10 screening criteria or consolidated under criteria 11 or 12 pass on to the PCCL. The summary data from the screening is shown in Exhibit 1.

Exhibit 1. Summary of Screening Microbial CCL 3 Universe

Pathogen Class	Total	Screening Criteria												On PCCL
		1	2	3	4	5	6	7	8	9	10	11	12	
Bacteria	540	125	14	10	37	117	7	0	29	154	2	28	5	12
Viruses	219	0	0	26	99	0	17	1	16	0	45	8	0	7
Protozoa ¹	66	0	0	1	29	3	0	4	7	7	0	6	0	7
Helminths	287	0	0	0	25	0	0	107	0	0	155	0	0	0
Fungi	313	0	0	0	0	13	1	0	0	309	0	0	0	3
Total	1,425	125	14	37	190	133	25	112	52	470	202	42	5	29

¹Cryptosporidium and Giardia are considered to be regulated by LT2. They were not screened and were not considered for CCL3.

Based upon this screening exercise conducted on 1,425 pathogens in the microbial CCL universe 1,394 pathogens were excluded from consideration while 29 pathogens passed to the PCCL. The specific screening decisions and references are presented in Attachment A.

4.0 Additional Screening Criteria Considered

As the CCL3 process developed, EPA considered screening criteria in addition to the twelve described above. While each of these additional criteria had merit, they were not consistent with the ultimate goal of the CCL3. The goal of the CCL is to identify potential contaminants that may require regulation. The basis for regulating specific contaminants is:

- Occurrence at a level and frequency that presents a potential public health risk, and
- The feasibility and opportunity for achieving meaningful reduction of exposure from such contaminants.

Listing contaminants on the CCL identifies the need for collecting additional information to inform the basis for potential regulations, and if that threshold of information is met, to support new regulation or revisions to existing regulations to control or improve control for such contaminants. If contaminants are not listed on a CCL (e.g., CCL 3), EPA may include those contaminants as occurrence and health effects information becomes available in a future listing. The following subsections present additional screening criteria that EPA considered but elected not to use at this time.

4.1 Organism Covered by Existing Regulations

4.1.1 Organisms Covered by Fecal Indicator Monitoring

EPA considered a screening criterion based upon contaminants that might be controlled through drinking water monitoring requirements under current drinking water regulations. Many of the bacteria in the CCL Universe, including the *Enterobacteriaceae* and members of the genera *Campylobacter* and *Vibrio*, are associated with fecal contamination and as such their presence could be signaled by the monitoring requirements under the Total Coliform Rule (TCR). Under the TCR, EPA chose to require monitoring for *Escherichia coli* (and total

coliforms) in finished drinking water because it provides a broad indication of the potential presence of fecal pathogens in drinking water, though more so for bacteria than for viruses and protozoa.

EPA chose not to exclude common enteric bacterial pathogens from the PCCL even though they may be indicated by the TCR. Numerous waterborne disease outbreaks have occurred in systems that were in compliance with maximum contaminant limit (MCL) drinking water monitoring requirements under the TCR. EPA recognizes that monitoring under the TCR (i.e., monitoring for total coliforms and *E. coli* or fecal coliforms when total coliforms are present, (Oldstadt, et al., 2007)) may not always be protective against bacterial fecal contamination. The frequency of total coliform monitoring under the TCR is limited, especially for smaller systems, thus transitory fecal contamination could go undetected. EPA believes that enteric pathogens should be included for further regulatory consideration in the CCL because monitoring under the TCR may be too limited to protect against specific types of bacterial fecal contamination.

4.1.2 Organisms Covered by Treatment Technique

According to the Safe Drinking Water Act (SDWA), EPA must select contaminants that “at the time of publication, are not subject to any proposed or promulgated national primary drinking water regulation...” In promulgating regulations for drinking water contaminants, EPA can set either a legal limit (MCL) and require monitoring for the contaminant in drinking water or EPA can establish a treatment technique requirement.

The Surface Water Treatment Rule (SWTR) included maximum contaminant level goals (MCLGs), for *Legionella*, *Giardia*, and viruses of zero because any amount of exposure to these contaminants represents some public health risk. Since measuring disease-causing microbes in drinking water is not considered to be feasible, EPA established a treatment technique requirement for these contaminants. The purpose of subsequent treatment technique requirements (Interim Enhanced Surface Water Treatment Rule, Long Term Surface Water Treatment Rule 1 and Long Term Surface Water Treatment Rule 2), which included an MCLG of zero for *Cryptosporidium*, is to reduce disease incidence associated with *Cryptosporidium* and other pathogenic microorganisms in drinking water. Therefore, they are excluded from the PCCL. *Cryptosporidium* and *Giardia* have a substantial amount of associated research regarding health effects and sensitivity to various treatment control measures.

The Ground Water Rule (GWR) sets treatment technique requirements to control for viruses (and pathogenic bacteria), because it was not feasible to directly monitor for viruses (or pathogenic bacteria) in drinking water. Under the GWR, if systems detect total coliforms in the distribution system, they are required to monitor for a fecal indicator (*E. coli*, coliphage, or enterococci) in the source water. If fecal contamination is found in the source water, the system must take remedial action to address contamination.

EPA did not exclude specific viruses and *Legionella* from the PCCL even though they have broad category MCLGs and treatment technique requirements. Viruses and *Legionella* include a wide range of taxa for which EPA has much less information concerning health effects and treatment information. The available information for different viral taxa (e.g., dose response and treatment data) was very limited when setting the treatment technique requirements for surface water and ground water systems. Also, different viral taxa have been implicated in various waterborne disease outbreaks in distribution systems. EPA did not have viral dose response or treatment data at the time of promulgating the treatment technique requirements. *Legionella* has been recognized as occurring in public water systems and has been recently implicated in numerous waterborne disease outbreaks (WBDOs) in distribution.

5.0 Data Sources Used for Screening the Microbial CCL 3 Universe

Various data sources were used to gather the information for this screening process. The data sources used were evaluated by EPA to ensure they were authoritative and appropriate. For microbes, the universe list was defined as all known human pathogens using the compilation of Taylor et al. (2001) as a practical starting point. This list was supplemented by adding fungi isolated from drinking water distribution systems that did not appear on the Taylor list, and by nominations from the scientific community, as described earlier in this report (see also *CCL 3 Microbes: Identifying the Universe*, EPA, 2007). For microbes, the data sources were sought to develop the information needed for screening (and later scoring) for the pathogens in the defined CCL 3 Microbial Universe.

The hierarchy of text-based resource materials begins with recently compiled authoritative reference books such as *The Manual of Clinical Microbiology*, 9th Edition, and *Field's Virology*, 5th Edition, both published in 2007. Both of these two-volume reference books have become established as the leading authoritative reference sources in their respective fields, both references have evolved through multiple editions, and both publications are considered reference standards to the scientific community for their scope and depth of coverage. They are edited by world-recognized authorities, and chapters are written by an international team of subject experts. *The parasites of Homo sapiens*, second edition, is a comprehensive source for information on the helminthes. These and other compiled sources listed in the reference list below were used to provide the information for screening the pathogens in the microbial CCL 3 Universe.

Primary publications were used to supplement compiled sources as necessary to support screening decisions for the fungi that were added to the CCL 3 Microbial Universe. However, some pathogens in the CCL 3 Microbial Universe were unusual or obscure, and were not covered in the compiled or primary sources. They required alternative sources, and these pathogens were searched for individually, using Web searches of authoritative on-line sources.

Web references were used to find information for screening rarely encountered viruses, protozoa, and fungi, primarily for information related to Criterion 9, "natural habitat in the environment," or Criterion 10, "pathogen not endemic to North America". Selected Web

references were evaluated to ensure that the site sponsors possessed the expertise to authoritatively address the issues of habitat and geographical distribution of the pathogen in question, and that the information was presented objectively and reviewed by members of the scientific community. Emphasis was placed upon Web sites sponsored and supported by government agencies or academic institutions, with evidence of peer review, such as an editorial board and/or expert contributors and reviewers.

Attachment A, The CCL 3 Microbial Universe List, tabulates the screening decisions for the CCL 3 Microbial Universe, and shows the screening reference used to support the decision. Page ranges cited and Web addresses/links provided are as narrow and specific as they can be, to identify the information related to the screening criterion used. Many pathogens could be screened by several criteria, however only one criterion is noted in the tabulation. Understanding the complete context and rationale for a screening decision often requires a review of the complete chapter from which the specified page range was taken.

6.0 Summary

Properly designed screening criteria will restrict the microbial PCCL to human pathogens that may cause drinking water-related diseases from ingestion, inhalation, or dermal contact. Pathogens failing to meet these criteria will remain in the microbial universe until epidemiological surveillance data or nomination processes support their reevaluation.

Ten screening criteria and two consolidation criteria have been proposed for selection of pathogens in the microbial CCL3 universe to a PCCL. Application of these twelve criteria to the microbial CCL3 universe results in a PCCL containing 29 pathogens

7.0 References

Acha, P. N. and B. Szyfres (ed.). 2001. Zoonoses and Communicable Diseases Common to Man and Animals. Volume I, Bacterioses and Mycoses. Scientific and Technical Publication No. 580. Pan American Health Organization. Washington D.C., USA.

Ashford, R. W. and W. Crewe. 2003. The parasites of *Homo sapiens*: An annotated checklist of the protozoa, helminths and arthropods for which we are home. Taylor and Francis, London, UK.

Bennett, J. V. And P. S. Brachman (ed.). 1998. Hospital infections. Lippincott-Raven, Philadelphia, PA.

Drasar, B. S., and P. A. Barrow. 1985. Intestinal Microbiology, Vol. 10. Van Nostrand Reinhold, Berkshire.

Finegold, S. M., S. V. L., and G. E. Mathisen. 1983. Normal Indigenous Intestinal Flora, p. 3-31. In D. J. Hentges (ed.), Human Intestinal Microflora in Health and Disease. Academic Press, New York.

Howard, D. H. (ed.) 2003. Pathogenic fungi in humans and animals, 2nd Edition. Marcel Dekker, Inc., New York, NY.

Isenberg, H. D. and R. F. D'Amato. 1995. Indigenous and Pathogenic Microorganisms of Humans. In Murray, P. R., E. J. Baron, M. A. Pfaller, F. C. Tenover, and R. H. Tenover, ed. Manual of Clinical Microbiology, 6th ed. ASM Press, Washington, DC.

Knipe, D. M. and P. M. Howley (ed.). 2007. Fields Virology, 5th Edition, Wolters-Kluwer Lippincott Williams & Williams, Philadelphia.

Krauss, H., A. Weber, M. Appel, B. Enders, H. D. Isenberg, H. G. Schiefer, W. Slenczka, A. von Graevenitz, and H. Zahner. 2003. Zoonoses, Infectious Diseases Transmissible from Animals to Humans, 3rd Edition. ASM Press, Washington, DC.

Mandel, G. L., J. E. Bennett, and R. Dolin (ed.). 2005. Douglas and Bennett's Principles and Practice of Infectious Diseases, 6th Edition, Elsevier, Philadelphia.

Murray, P. R., E. J. Baron, J. H. Jorgensen, M. L. Landry, and M. A. Pfaller (ed.). 2007. Manual of Clinical Microbiology, 9th Edition, ASM Press, Washington, DC.

National Research Council (NRC). 2001. Classifying Drinking Water Contaminants for Regulatory Consideration. National Academy Press, Washington DC.

National Drinking Water Advisory Council (NDWAC). 2004. National Drinking Water Advisory Council Report on the CCL Classification Process to the U. S. Environmental Protection Agency, May 19, 2004

Palmer, S. R., Lord Soulsby, and D. I. H. Simpson (ed.). 1998. Zoonoses: biology, clinical practice, and public health control. Oxford University Press, Oxford, UK.

Taylor, L. H., S. M. Latham, and M. E. Woolhouse. 2001. Risk factors for human disease emergence *Philosophical Transactions of the Royal Society of London B*. Vol. 356, pp. 983-989 (See electronic Appendix A, No. 1411, pp. 1-9).

United States Environmental Protection Agency (USEPA). 2006. Request for nominations of drinking water contaminants for the contaminant candidate list. *Federal Register* 71(199):60704-60708.

United States Environmental Protection Agency (USEPA). 2009. Final Contaminant Candidate List 3 Microbes: Identifying the Universe.

Wenzel, R. P. (ed.). 2003. Prevention and control of nosocomial infections. Lippincott Williams & Wilkins, Philadelphia, PA.

Attachment A: Screening to the PCCL

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference		
	1	2	3	4	5	6	7	8	9	10	11	12				
<i>Abiotrophia defectiva</i>					x											MCM-9, p. 445
<i>Achromobacter piechaudii</i>									x							MCM-9, p. 777
<i>Achromobacter xylosoxidans</i>									x							MCM-9, p. 777
<i>Acidaminococcus fermentans</i>	x															MCM-9, p. 862-863
<i>Acinetobacter baumannii</i>									x							MCM-9, p. 771-773
<i>Acinetobacter calcoaceticus</i>									x							MCM-9, p. 771-773
<i>Acinetobacter haemolyticus</i>									x							MCM-9, p. 771-773
<i>Acinetobacter johnsonii</i>									x							MCM-9, p. 771-773
<i>Acinetobacter junii</i>									x							MCM-9, p. 771-773
<i>Acinetobacter lwoffii</i>									x							MCM-9, p. 771-773
<i>Acinetobacter radioresistens</i>									x							MCM-9, p. 771-773
<i>Actinobacillus equuli</i>				x												MCM-9, p. 621-623
<i>Actinobacillus hominis</i>				x												MCM-9, p. 621-623
<i>Actinobacillus lignieresii</i>				x												MCM-9, p. 621-623
<i>Actinobacillus pleuropneumoniae</i>				x												MCM-9, p. 621-623
<i>Actinobacillus suis</i>				x												MCM-9, p. 621-623
<i>Actinobacillus ureae</i>									x							MCM-9, p. 621-623
<i>Actinomyces georgiae</i>	x															MCM-9, p. 872-873
<i>Actinomyces gerencseriae</i>	x															MCM-9, p. 872-873
<i>Actinomyces israelii</i>	x															MCM-9, p. 872-873
<i>Actinomyces meyeri</i>	x															MCM-9, p. 872-873
<i>Actinomyces naeslundii</i>	x															MCM-9, p. 872-873
<i>Actinomyces neuui</i>	x															MCM-9, p. 872-873
<i>Actinomyces odontolyticus</i>	x															MCM-9, p. 872-873
<i>Actinomyces radingae</i>	x															MCM-9, p. 872-873
<i>Actinomyces turicensis</i>	x															MCM-9, p. 872-873
<i>Aerococcus viridans</i>									x							MCM-9, p. 445
<i>Aeromonas caviae</i>									x							MCM-9, p. 716-717
<i>Aeromonas hydrophila</i>														<i>Aeromonas hydrophila</i>		
<i>Aeromonas sobria</i>									x							MCM-9, p. 716-717
<i>Aeromonas veronii</i>									x							MCM-9, p. 716-717
<i>Alcaligenes odorans</i>										x						MCM-9, p. 777
<i>Amycolatopsis orientalis</i>										x						MCM-9, p. 520
<i>Arcanobacterium bernardiae</i>																MCM-9, p. 489-490
<i>Arcanobacterium heamolyticum</i>																MCM-9, p. 489-490
<i>Arcanobacterium pyogenes</i>																MCM-9, p. 489-490
<i>Arcobacter butzleri</i>														<i>Arcobacter butzleri</i>		
<i>Arcobacter cryaerophilus</i>													x			MCM-9, p. 935
<i>Bacillus anthracis</i>										x						MCM-9, p. 455-456
<i>Bacillus cereus</i>										x						MCM-9, p. 455-456
<i>Bacillus circulans</i>										x						MCM-9, p. 455-456
<i>Bacillus coagulans</i>										x						MCM-9, p. 455-456
<i>Bacillus licheniformis</i>										x						MCM-9, p. 455-456
<i>Bacillus mycoides</i>										x						MCM-9, p. 455-456
<i>Bacillus pumilus</i>										x						MCM-9, p. 455-456
<i>Bacillus sphaericus</i>										x						MCM-9, p. 455-456

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference			
	1	2	3	4	5	6	7	8	9	10	11	12					
<i>Bacillus subtilis</i>									x								MCM-9, p. 455-456
<i>Bacillus thuringiensis</i>									x								MCM-9, p. 455-456
<i>Bacteroides caccae</i>	x																MCM-9, p. 911
<i>Bacteroides distasonis</i>	x																MCM-9, p. 911
<i>Bacteroides eggerthii</i>	x																MCM-9, p. 911
<i>Bacteroides forsythus</i>	x																MCM-9, p. 911
<i>Bacteroides fragilis</i>	x																MCM-9, p. 911
<i>Bacteroides galacturonicus</i>	x																MCM-9, p. 911
<i>Bacteroides merdae</i>	x																MCM-9, p. 911
<i>Bacteroides ovatus</i>	x																MCM-9, p. 911
<i>Bacteroides pectinophilus</i>	x																MCM-9, p. 911
<i>Bacteroides splanchnicus</i>	x																MCM-9, p. 911
<i>Bacteroides stercoris</i>	x																MCM-9, p. 911
<i>Bacteroides thetaiotaomicron</i>	x																MCM-9, p. 911
<i>Bacteroides uniformis</i>	x																MCM-9, p. 911
<i>Bacteroides ureolyticus</i>	x																MCM-9, p. 911
<i>Bacteroides vulgatus</i>	x																MCM-9, p. 911
<i>Bartonella bacilliformis</i>				x													MCM-9, p. 850-851
<i>Bartonella elizabethae</i>				x													MCM-9, p. 850-851
<i>Bartonella henselae</i>				x													MCM-9, p. 850-851
<i>Bartonella quintana</i>				x													MCM-9, p. 850-851
<i>Bergeyella zoohelcum</i>					x												MCM-9, p. 793
<i>Bifidobacterium dentium</i>	x																MCM-9, p. 872-873
<i>Bilophila wadsworthia</i>	x																MCM-9, p. 911
<i>Bordetella avium</i>																	MCM-9, p. 803
<i>Bordetella bronchiseptica</i>																	MCM-9, p. 803
<i>Bordetella parapertussis</i>																	MCM-9, p. 803
<i>Bordetella pertussis</i>																	MCM-9, p. 803
<i>Borrelia brasiliensis</i>				x													MCM-9, p. 972-973
<i>Borrelia burgdorferi</i>				x													MCM-9, p. 972-973
<i>Borrelia caucasica</i>				x													MCM-9, p. 972-973
<i>Borrelia crocidurae</i>				x													MCM-9, p. 972-973
<i>Borrelia duttonii</i>				x													MCM-9, p. 972-973
<i>Borrelia hermsii</i>				x													MCM-9, p. 972-973
<i>Borrelia hispanica</i>				x													MCM-9, p. 972-973
<i>Borrelia latyschewii</i>				x													MCM-9, p. 972-973
<i>Borrelia mazzottii</i>				x													MCM-9, p. 972-973
<i>Borrelia parkeri</i>				x													MCM-9, p. 972-973
<i>Borrelia persica</i>				x													MCM-9, p. 972-973
<i>Borrelia recurrentis</i>				x													MCM-9, p. 972-973
<i>Borrelia turicatae</i>				x													MCM-9, p. 972-973
<i>Borrelia venezuelensis</i>				x													MCM-9, p. 972-973
<i>Brevibacillus brevis</i>									x								MCM-9, p. 455, 458
<i>Brevundimonas diminuta</i>									x								MCM-9, p. 750-751
<i>Brevundimonas vesicularis</i>									x								MCM-9, p. 750-751
<i>Brucella melitensis</i>		x															MCM-9, p. 825

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference		
	1	2	3	4	5	6	7	8	9	10	11	12				
<i>Burkholderia cepacia</i>									x							MCM-9, p. 750-751
<i>Burkholderia mallei</i>										x						MCM-9, p. 752
<i>Burkholderia pseudomallei</i>									x							MCM-9, p. 752
<i>Campylobacter coli</i>											x					MCM-9, p. 934-935
<i>Campylobacter concisus</i>					x											MCM-9, p. 933-934
<i>Campylobacter curvus</i>					x											MCM-9, p. 933-934
<i>Campylobacter fetus</i>								x								MCM-9, p. 934-935
<i>Campylobacter gracilis</i>					x											MCM-9, p. 933-934
<i>Campylobacter hyointestinalis</i>								x								MCM-9, p. 934-935
<i>Campylobacter jejuni</i>														<i>Campylobacter jejuni</i>		
<i>Campylobacter lari</i>											x					MCM-9, p. 935
<i>Campylobacter rectus</i>					x											MCM-9, p. 933-934
<i>Campylobacter sputorum</i>								x								MCM-9, p. 934-935
<i>Campylobacter upsaliensis</i>								x								MCM-9, p. 934-935
<i>Capnocytophaga canimorsus</i>					x											MCM-9, p. 621, 629
<i>Capnocytophaga cynodegmi</i>					x											MCM-9, p. 621, 629
<i>Capnocytophaga gingivalis</i>					x											MCM-9, p. 621, 629
<i>Capnocytophaga ochracea</i>					x											MCM-9, p. 621, 629
<i>Capnocytophaga sputigena</i>					x											MCM-9, p. 621, 629
<i>Cardiobacterium hominis</i>					x											MCM-9, p. 621, 628-629
<i>Cedecea davisae</i>									x							MCM-9, p. 702, 704
<i>Cedecea lapagei</i>									x							MCM-9, p. 702, 704
<i>Cedecea neteri</i>									x							MCM-9, p. 702, 704
<i>Cellulomonas cellulans</i>									x							MCM-9, p. 489-490, 506
<i>Cellulomonas turbata</i>									x							MCM-9, p. 489-490, 506
<i>Centipeda periodontii</i>	x															MCM-9, p. 911
<i>Chlamydia trachomatis</i>			x													MCM-9, p. 1021
<i>Chlamydophila pneumoniae</i>		x														MCM-9, p. 1021
<i>Chlamydophila psittaci</i>		x														MCM-9, p. 1021
<i>Chromobacterium violaceum</i>								x								MCM-9, p. 621, 624-625
<i>Chryseobacterium balustinum</i>									x							MCM-9, p. 791-792
<i>Chryseobacterium meningosepticum</i>									x							MCM-9, p. 791-792
<i>Citrobacter amalonaticus</i>					x											MCM-9, p. 699, 703
<i>Citrobacter braakii</i>					x											MCM-9, p. 699, 703
<i>Citrobacter farmeri</i>					x											MCM-9, p. 699, 703
<i>Citrobacter freundii</i>					x											MCM-9, p. 699, 703
<i>Citrobacter koseri</i>					x											MCM-9, p. 699, 703
<i>Citrobacter rodentium</i>					x											MCM-9, p. 699, 703
<i>Citrobacter sedlakii</i>					x											MCM-9, p. 699, 703
<i>Citrobacter werkmanii</i>					x											MCM-9, p. 699, 703
<i>Citrobacter youngae</i>					x											MCM-9, p. 699, 703
<i>Clostridium baratii</i>	x															MCM-9, p. 889
<i>Clostridium bifermentans</i>	x															MCM-9, p. 889
<i>Clostridium botulinum</i>	x															MCM-9, p. 889
<i>Clostridium butyricum</i>	x															MCM-9, p. 889
<i>Clostridium chauvoei</i>	x															MCM-9, p. 889

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference			
	1	2	3	4	5	6	7	8	9	10	11	12					
<i>Clostridium difficile</i>	x																MCM-9, p. 889
<i>Clostridium fallax</i>	x																MCM-9, p. 889
<i>Clostridium histolyticum</i>	x																MCM-9, p. 889
<i>Clostridium novyi</i>	x																MCM-9, p. 889
<i>Clostridium perfringens</i>	x																MCM-9, p. 889
<i>Clostridium ramosum</i>	x																MCM-9, p. 889
<i>Clostridium septicum</i>	x																MCM-9, p. 889
<i>Clostridium sordellii</i>	x																MCM-9, p. 889
<i>Clostridium sporogenes</i>	x																MCM-9, p. 889
<i>Clostridium tertium</i>	x																MCM-9, p. 889
<i>Clostridium tetani</i>	x																MCM-9, p. 889
<i>Collinsella aerofaciens</i>	x																MCM-9, p. 873, 875
<i>Comamonas testosteroni</i>										x							MCM-9, p. 750-751
<i>Corynebacterium afermentans</i>						x											MCM-9, p. 489-490
<i>Corynebacterium argentoratense</i>						x											MCM-9, p. 489-490
<i>Corynebacterium bovis</i>						x											MCM-9, p. 489-490
<i>Corynebacterium diphtheriae</i>							x										MCM-9, p. 489-491
<i>Corynebacterium jeikeium</i>						x											MCM-9, p. 489-490
<i>Corynebacterium kutscheri</i>						x											MCM-9, p. 489-490
<i>Corynebacterium macginleyi</i>						x											MCM-9, p. 489-490
<i>Corynebacterium minutissimum</i>						x											MCM-9, p. 489-490
<i>Corynebacterium propinquum</i>						x											MCM-9, p. 489-490
<i>Corynebacterium pseudodiphthericum</i>						x											MCM-9, p. 489-490
<i>Corynebacterium pseudotuberculosis</i>						x											MCM-9, p. 489-490
<i>Corynebacterium striatum</i>						x											MCM-9, p. 489-490
<i>Corynebacterium ulcerans</i>						x											MCM-9, p. 489-490
<i>Corynebacterium urealyticum</i>						x											MCM-9, p. 489-490
<i>Corynebacterium xerosis</i>						x											MCM-9, p. 489-490
<i>Coxiella burnetii</i>		x															MCM-9, p. 1062-1063
<i>Delftia acidovorans</i>										x							MCM-9, p. 750-751
<i>Dermatophilus congolensis</i>										x							MCM-9, p. 520
<i>Dichelobacter nodosus</i>	x																MCM-8, p. 880-881
<i>Edwardsiella hoshinae</i>										x							MCM-9, p. 702-704
<i>Edwardsiella tarda</i>										x							MCM-9, p. 702-704
<i>Eggerthella lenta</i>	x																MCM-9, p. 872-873
<i>Ehrlichia chaffeensis</i>						x											MCM-9, p. 1046-1049
<i>Ehrlichia equi</i>						x											MCM-9, p. 1046-1049
<i>Ehrlichia ewingii</i>						x											MCM-9, p. 1046-1049
<i>Ehrlichia phagocytophila</i>						x											MCM-9, p. 1046-1049
<i>Ehrlichia sennetsu</i>						x											MCM-9, p. 1046-1049
<i>Eikenella corrodens</i>							x										MCM-9, p. 621, 625
<i>Enterobacter aerogenes</i>										x							MCM-9, p. 699, 702
<i>Enterobacter amnigenus</i>										x							MCM-9, p. 699, 702
<i>Enterobacter asburiae</i>										x							MCM-9, p. 699, 702
<i>Enterobacter cancerogenus</i>										x							MCM-9, p. 699, 702
<i>Enterobacter cloacae</i>										x							MCM-9, p. 699, 702

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference			
	1	2	3	4	5	6	7	8	9	10	11	12					
<i>Enterobacter gergoviae</i>									x								MCM-9, p. 699, 702
<i>Enterobacter hormaechei</i>									x								MCM-9, p. 699, 702
<i>Enterobacter sakazakii</i>									x								MCM-9, p. 699, 702
<i>Enterococcus avium</i>									x								MCM-9, p. 431-432
<i>Enterococcus casseliflavus</i>									x								MCM-9, p. 431-432
<i>Enterococcus durans</i>									x								MCM-9, p. 431-432
<i>Enterococcus faecalis</i>									x								MCM-9, p. 431-432
<i>Enterococcus faecium</i>									x								MCM-9, p. 431-432
<i>Enterococcus flavescens</i>									x								MCM-9, p. 431-432
<i>Enterococcus gallinarum</i>									x								MCM-9, p. 431-432
<i>Enterococcus hirae</i>									x								MCM-9, p. 431-432
<i>Enterococcus mundtii</i>									x								MCM-9, p. 431-432
<i>Enterococcus raffinosus</i>									x								MCM-9, p. 431-432
<i>Erysipelothrix rhusiopathiae</i>									x								MCM-9, p. 480
<i>Escherichia coli</i>																	<i>Escherichia coli</i>
<i>Eubacterium brachy</i>	x																MCM-9, p. 872-873
<i>Eubacterium combesii</i>	x																MCM-9, p. 872-873
<i>Eubacterium contortum</i>	x																MCM-9, p. 872-873
<i>Eubacterium cylindroides</i>	x																MCM-9, p. 872-873
<i>Eubacterium limosum</i>	x																MCM-9, p. 872-873
<i>Eubacterium moniliforme</i>	x																MCM-9, p. 872-873
<i>Eubacterium multiforme</i>	x																MCM-9, p. 872-873
<i>Eubacterium nodatum</i>	x																MCM-9, p. 872-873
<i>Eubacterium rectale</i>	x																MCM-9, p. 872-873
<i>Eubacterium saburreum</i>	x																MCM-9, p. 872-873
<i>Eubacterium saphenum</i>	x																MCM-9, p. 872-873
<i>Eubacterium sulci</i>	x																MCM-9, p. 872-873
<i>Eubacterium tenue</i>	x																MCM-9, p. 872-873
<i>Eubacterium timidum</i>	x																MCM-9, p. 872-873
<i>Ewingella americana</i>																	MCM-9, p. 702-704
<i>Fibrobacter intestinalis</i>	x																MCM-8, p. 880-881
<i>Fillifactor alocis</i>	x																MCM-9, p. 872-874
<i>Fingoldia magna</i>	x																MCM-9, p. 862-863
<i>Fluoribacter bozemanae</i>																	MCM-9, p. 835
<i>Fluoribacter dumoffii</i>																	MCM-9, p. 835
<i>Fluoribacter gormanii</i>																	MCM-9, p. 835
<i>Francisella tularensis</i>																	MCM-9, p. 816-817
<i>Fusobacterium mortiferum</i>	x																MCM-9, p. 911
<i>Fusobacterium necrophorum</i>	x																MCM-9, p. 911
<i>Fusobacterium nucleatum</i>	x																MCM-9, p. 911
<i>Fusobacterium periodonticum</i>	x																MCM-9, p. 911
<i>Fusobacterium ulcerans</i>	x																MCM-9, p. 911
<i>Fusobacterium varium</i>	x																MCM-9, p. 911
<i>Gardnerella vaginalis</i>																	MCM-9, p. 508
<i>Gemella morbillorum</i>																	MCM-9, p. 445
<i>Gordonia amarae</i>									x								MCM-9, p. 520

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference			
	1	2	3	4	5	6	7	8	9	10	11	12					
<i>Gordonia bronchialis</i>									x								MCM-9, p. 520
<i>Gordonia rubropertincta</i>									x								MCM-9, p. 520
<i>Gordonia sputi</i>									x								MCM-9, p. 520
<i>Gordonia terrae</i>									x								MCM-9, p. 520
<i>Granulicatella adiacens</i>						x											MCM-9, p. 445
<i>Haemophilus actinomycetemcomitans</i>																	MCM-9, p. 623, 636-637
<i>Haemophilus aphrophilus</i>																	MCM-9, p. 636-637
<i>Haemophilus ducreyi</i>				x													MCM-9, p. 636-637
<i>Haemophilus haemolyticus</i>																	MCM-9, p. 636-637
<i>Haemophilus influenzae</i>																	MCM-9, p. 636-637
<i>Haemophilus parahaemolyticus</i>																	MCM-9, p. 636-637
<i>Haemophilus parainfluenzae</i>																	MCM-9, p. 636-637
<i>Haemophilus paraphrophilus</i>																	MCM-9, p. 636-637
<i>Haemophilus segnis</i>																	MCM-9, p. 636-637
<i>Hafnia alvei</i>										x							MCM-9, p. 699
<i>Helicobacter cinaedi</i>													x				MCM-9, p. 949-950
<i>Helicobacter fennelliae</i>														x			MCM-9, p. 949-950
<i>Helicobacter heilmannii</i>															x		MCM-9, p. 949-950
<i>Helicobacter pullorum</i>																x	MCM-9, p. 949-950
<i>Helicobacter pylori</i>																	<i>Helicobacter pylori</i>
<i>Kingella denitrificans</i>																	MCM-9, p. 621, 625
<i>Kingella kingae</i>																	MCM-9, p. 621, 625
<i>Klebsiella granulomatis</i>																	MCM-9, p. 699, 702
<i>Klebsiella ornithinolytica</i>																	MCM-9, p. 699, 702
<i>Klebsiella oxytoca</i>																	MCM-9, p. 699, 702
<i>Klebsiella pneumoniae</i>																	MCM-9, p. 699, 702
<i>Kluyvera ascorbata</i>																	MCM-9, p. 702-704
<i>Kluyvera cryocrescens</i>																	MCM-9, p. 702-704
<i>Lactobacillus sp.</i>		x															MCM-9, p. 872-873
<i>Legionella anisa</i>																	MCM-9, p. 836
<i>Legionella birminghamensis</i>																	MCM-9, p. 836
<i>Legionella cherrii</i>																	MCM-9, p. 836
<i>Legionella cincinnatiensis</i>																	MCM-9, p. 836
<i>Legionella feeleeii</i>																	MCM-9, p. 836
<i>Legionella hackeliae</i>																	MCM-9, p. 836
<i>Legionella jordanis</i>																	MCM-9, p. 836
<i>Legionella lansingensis</i>																	MCM-9, p. 836
<i>Legionella longbeachae</i>																	MCM-9, p. 836
<i>Legionella oakridgensis</i>																	MCM-9, p. 836
<i>Legionella pneumophila</i>																	<i>Legionella pneumophila</i>
<i>Legionella rubrilucens</i>																	MCM-9, p. 836
<i>Legionella sainthelensi</i>																	MCM-9, p. 836
<i>Legionella tucsonensis</i>																	MCM-9, p. 836
<i>Legionella wadsworthii</i>																	MCM-9, p. 836
<i>Leifsonia aquatica</i>																	MCM-9, p. 485, 489
<i>Leptospira borgpetersenii</i>																	MCM-9, p. 963-965

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference			
	1	2	3	4	5	6	7	8	9	10	11	12					
<i>Leptospira inadai</i>									x								MCM-9, p. 963-965
<i>Leptospira interrogans</i>									x								MCM-9, p. 963-965
<i>Leptospira kirschneri</i>									x								MCM-9, p. 963-965
<i>Leptospira meyeri</i>									x								MCM-9, p. 963-965
<i>Leptospira noguchii</i>									x								MCM-9, p. 963-965
<i>Leptospira santarosai</i>									x								MCM-9, p. 963-965
<i>Leptospira weilii</i>									x								MCM-9, p. 963-965
<i>Leptotrichia buccalis</i>	x																MCM-9, p. 911
<i>Listeria ivanovii</i>									x								MCM-9, p. 474
<i>Listeria monocytogenes</i>									x								MCM-9, p. 474
<i>Listeria seeligeri</i>									x								MCM-9, p. 474
<i>Listeria welshimeri</i>									x								MCM-9, p. 474
<i>Mannheimia haemolytica</i>																	MCM-9, p. 621-622
<i>Megamonas hypermegale</i>	x																MCM-9, p. 913
<i>Megasphaera sp.</i>	x																MCM-9, p. 862
<i>Methylobacterium mesophilicum*</i>									x								MCM-9, p. 789
<i>Methylobacterium zatmanii*</i>									x								MCM-9, p. 789
<i>Micromonas micros</i>	x																MCM-9, p. 487
<i>Moraxella atlantae</i>																	MCM-9, p. 774-775
<i>Moraxella bovis</i>																	MCM-9, p. 774-775
<i>Moraxella catarrhalis</i>																	MCM-9, p. 774-775
<i>Moraxella caviae</i>																	MCM-9, p. 774-775
<i>Moraxella cuniculi</i>																	MCM-9, p. 774-775
<i>Moraxella lacunata</i>																	MCM-9, p. 774-775
<i>Moraxella lincolnii</i>																	MCM-9, p. 774-775
<i>Moraxella liquefaciens</i>																	MCM-9, p. 774-775
<i>Moraxella nonliquefaciens</i>																	MCM-9, p. 774-775
<i>Moraxella osloensis</i>																	MCM-9, p. 774-775
<i>Moraxella ovis</i>																	MCM-9, p. 774-775
<i>Morganella morganii</i>																	MCM-9, p. 700, 703
<i>Mycobacterium abscessus</i>										x							MCM9, p. 544
<i>Mycobacterium africanum</i>												x					MCM-9, p. 546
<i>Mycobacterium asiaticum</i>										x							MCM-9, p. 544, 549
<i>Mycobacterium avium</i>																	<i>Mycobacterium avium</i>
<i>Mycobacterium bovis</i>																	MCM-9, p. 544
<i>Mycobacterium celatum</i>												x					MCM-9, p. 544, 549
<i>Mycobacterium chelonae</i>												x					MCM9, p. 544
<i>Mycobacterium conspicuum</i>												x					MCM9, p. 544
<i>Mycobacterium fortuitum</i>												x					MCM9, p. 544
<i>Mycobacterium genavense</i>												x					MCM9, p. 544
<i>Mycobacterium gordonae</i>												x					MCM-9, p. 544, 549-50
<i>Mycobacterium haemophilum</i>												x					MCM9, p. 544
<i>Mycobacterium kansasii</i>												x					MCM9, p. 544
<i>Mycobacterium leprae</i>																	MCM-9, p. 544
<i>Mycobacterium malmoense</i>												x					MCM-9, p. 544, 548
<i>Mycobacterium marinum</i>												x					MCM-9, p. 544, 548

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference		
	1	2	3	4	5	6	7	8	9	10	11	12				
<i>Mycobacterium mucogenicum</i>									x							MCM9, p. 544
<i>Mycobacterium peregrinum</i>									x							MCM9, p. 544
<i>Mycobacterium porcinum</i>									x							MCM9, p. 544
<i>Mycobacterium scrofulaceum</i>									x							MCM-9, p. 544, 550
<i>Mycobacterium senegalense</i>									x							MCM9, p. 544
<i>Mycobacterium shimoidei</i>									x							MCM-9, p. 544, 550
<i>Mycobacterium simiae</i>									x							MCM-9, p. 544, 548
<i>Mycobacterium smegmatis</i>									x							MCM9, p. 544
<i>Mycobacterium szulgai</i>									x							MCM-9, p. 544, 548
<i>Mycobacterium tuberculosis</i>															x	MCM-9, p. 544-546
<i>Mycobacterium ulcerans</i>									x							MCM-9, p. 544, 549
<i>Mycobacterium xenopi</i>									x							MCM-9, p. 544, 549
<i>Mycoplasma fermentans</i>										x						MCM-9, p. 1004-1007
<i>Mycoplasma genitalium</i>										x						MCM-9, p. 1004-1007
<i>Mycoplasma hominis</i>										x						MCM-9, p. 1004-1007
<i>Mycoplasma pneumoniae</i>										x						MCM-9, p. 1004-1007
<i>Mycoplasma salivarium</i>										x						MCM-9, p. 1004-1007
<i>Myroides odoratus</i>									x							MCM-9, p. 780-781
<i>Neisseria cinerea</i>															x	MCM-9, p. 616
<i>Neisseria elongata</i>															x	MCM-9, p. 616
<i>Neisseria flava</i>															x	MCM-9, p. 616
<i>Neisseria flavescens</i>															x	MCM-9, p. 616
<i>Neisseria gonorrhoeae</i>															x	MCM-9, p. 601
<i>Neisseria lactamica</i>															x	MCM-9, p. 616
<i>Neisseria meningitidis</i>															x	MCM-9, p. 601-602
<i>Neisseria mucosa</i>															x	MCM-9, p. 616
<i>Neisseria perflava</i>															x	MCM-9, p. 616
<i>Neisseria sicca</i>															x	MCM-9, p. 616
<i>Neisseria subflava</i>															x	MCM-9, p. 616
<i>Neisseria weaveri</i>															x	MCM-9, p. 602
<i>Nocardia asteroides</i>															x	MCM-9, p. 520
<i>Nocardia brasiliensis</i>															x	MCM-9, p. 520
<i>Nocardia caviae</i>															x	MCM-9, p. 520
<i>Nocardia farcinica</i>															x	MCM-9, p. 520
<i>Nocardia nova</i>															x	MCM-9, p. 520
<i>Nocardia otitidiscaviarum</i>															x	MCM-9, p. 520
<i>Nocardia pseudobrasiliensis</i>															x	MCM-9, p. 520
<i>Nocardia transvalensis</i>															x	MCM-9, p. 520
<i>Ochrobactrum anthropi</i>															x	MCM-9, p. 784
<i>Oligella ureolytica</i>															x	MCM-9, p. 775
<i>Oligella urethralis</i>															x	MCM-9, p. 775
<i>Orientia tsutsugamushi</i>															x	MCM-9, p. 1036-1037
<i>Paenibacillus alvei</i>															x	MCM-9, p. 455, 458
<i>Paenibacillus macerans</i>															x	MCM-9, p. 455, 458
<i>Pantoea agglomerans</i>															x	MCM-9, p. 700
<i>Pasteurella aerogenes</i>															x	MCM-9, p. 621-622

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference		
	1	2	3	4	5	6	7	8	9	10	11	12				
<i>Pasteurella caballi</i>					x											MCM-9, p. 621-622
<i>Pasteurella canis</i>					x											MCM-9, p. 621-622
<i>Pasteurella dagmatis</i>					x											MCM-9, p. 621-622
<i>Pasteurella multocida</i>					x											MCM-9, p. 621-622
<i>Pasteurella pneumotropica</i>					x											MCM-9, p. 621-622
<i>Pasteurella stomatis</i>					x											MCM-9, p. 621-622
<i>Peptococcus niger</i>	x															MCM-9, p. 862-863
<i>Peptostreptococcus anaerobius</i>	x															MCM-9, p. 862-863
<i>Peptostreptococcus asaccharolyticus</i>	x															MCM-9, p. 862-863
<i>Peptostreptococcus lactolyticus</i>	x															MCM-9, p. 862-863
<i>Peptostreptococcus prevotii</i>	x															MCM-9, p. 862-863
<i>Peptostreptococcus vaginalis</i>	x															MCM-9, p. 862-863
<i>Photobacterium damsela</i>									x							MCM-9, p. 723, 725
<i>Plesiomonas shigelloides</i>														<i>Plesiomonas shigelloides</i>		
<i>Porphyromonas asaccharolytica</i>	x															MCM-9, p. 911
<i>Porphyromonas catoniae</i>	x															MCM-9, p. 911
<i>Porphyromonas circumdentaria</i>	x															MCM-9, p. 911
<i>Porphyromonas endodontalis</i>	x															MCM-9, p. 911
<i>Porphyromonas gingivalis</i>	x															MCM-9, p. 911
<i>Porphyromonas levii</i>	x															MCM-9, p. 911
<i>Porphyromonas macacae</i>	x															MCM-9, p. 911
<i>Prevotella bivia</i>	x															MCM-9, p. 911
<i>Prevotella buccae</i>	x															MCM-9, p. 911
<i>Prevotella buccalis</i>	x															MCM-9, p. 911
<i>Prevotella corporis</i>	x															MCM-9, p. 911
<i>Prevotella dentalis</i>	x															MCM-9, p. 911
<i>Prevotella denticola</i>	x															MCM-9, p. 911
<i>Prevotella disiens</i>	x															MCM-9, p. 911
<i>Prevotella enoeca</i>	x															MCM-9, p. 911
<i>Prevotella heparinolytica</i>	x															MCM-9, p. 911
<i>Prevotella intermedia</i>	x															MCM-9, p. 911
<i>Prevotella loescheii</i>	x															MCM-9, p. 911
<i>Prevotella melaninogenica</i>	x															MCM-9, p. 911
<i>Prevotella nigrescens</i>	x															MCM-9, p. 911
<i>Prevotella oralis</i>	x															MCM-9, p. 911
<i>Prevotella oris</i>	x															MCM-9, p. 911
<i>Prevotella oulora</i>	x															MCM-9, p. 911
<i>Prevotella ruminicola</i>	x															MCM-9, p. 911
<i>Prevotella tanneriae</i>	x															MCM-9, p. 911
<i>Prevotella veroralis</i>	x															MCM-9, p. 911
<i>Prevotella zooglyphiformans</i>	x															MCM-9, p. 911
<i>Propionibacterium acnes</i>	x															MCM-9, p. 872-873
<i>Propionibacterium avidum</i>	x															MCM-9, p. 872-873
<i>Propionibacterium granulosum</i>	x															MCM-9, p. 872-873
<i>Propionibacterium propionicus</i>	x															MCM-9, p. 872-873
<i>Proteus mirabilis</i>									x							MCM-9, p. 700, 703

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference		
	1	2	3	4	5	6	7	8	9	10	11	12				
<i>Proteus penneri</i>									x							MCM-9, p. 700, 703
<i>Proteus vulgaris</i>									x							MCM-9, p. 700, 703
<i>Providencia alcalifaciens</i>									x							MCM-9, p. 700, 703
<i>Providencia rettgeri</i>									x							MCM-9, p. 700, 703
<i>Providencia stuartii</i>									x							MCM-9, p. 700, 703
<i>Pseudomonas aeruginosa</i>									x							MCM-9, p. 734-735
<i>Pseudomonas alcaligenes</i>									x							MCM-9, p. 734-735
<i>Pseudomonas fluorescens</i>									x							MCM-9, p. 734-735
<i>Pseudomonas pseudoalcaligenes</i>									x							MCM-9, p. 734-735
<i>Pseudomonas putida</i>									x							MCM-9, p. 734-735
<i>Pseudomonas stutzeri</i>									x							MCM-9, p. 734-735
<i>Pseudonocardia autotrophica</i>									x							MCM-9, p. 516, 519-520
<i>Pseudoramibacter alactolyticus</i>	x															MCM-9, p. 872-873
<i>Psychrobacter phenylpyruvicus</i>									x							MCM-9, p. 774-775
<i>Rahnella aquatilis</i>									x							MCM-9, p. 698-701
<i>Ralstonia pickettii</i>									x							MCM-9, p. 750-751
<i>Rhodococcus equi</i>									x							MCM-9, p. 520
<i>Rhodococcus erythropolis</i>									x							MCM-9, p. 520
<i>Rhodococcus fascians</i>									x							MCM-9, p. 520
<i>Rhodococcus rhodnii</i>									x							MCM-9, p. 520
<i>Rhodococcus rhodochrous</i>									x							MCM-9, p. 520
<i>Rickettsia africana</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia akari</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia australis</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia conorii</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia felis</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia honei</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia japonica</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia massiliae</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia prowazekii</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia rickettsii</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia sibirica</i>					x											MCM-9, p. 1036-1037
<i>Rickettsia typhi</i>					x											MCM-9, p. 1036-1037
<i>Rothia dentocariosa</i>						x										MCM-9, p. 506
<i>Ruminococcus productus</i>	x															MCM-9, p. 862-863
<i>Saccharomonospora viridis</i>									x							MCM-9, p. 520, 526
<i>Saccharopolyspora rectivirgula</i>									x							MCM-9, p. 520, 526
<i>Salmonella bongori</i>											x					MCM-9, p. 659-660, 679-670
<i>Salmonella choleraesuis</i>												x				MCM-9, p. 659-660, 679-670
<i>Salmonella enteritidis</i>													x			MCM-9, p. 659-660, 679-670
<i>Salmonella typhi</i>														x		MCM-9, p. 659-660, 679-670
<i>Salmonella typhimurium</i>																<i>Salmonella enterica</i>
<i>Sebaldella termitidis</i>	x															MCM-8, p. 880-881
<i>Selenomonas artemidis</i>	x															MCM-9, p. 911
<i>Selenomonas diana</i>	x															MCM-9, p. 911
<i>Selenomonas flueggei</i>	x															MCM-9, p. 911

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference			
	1	2	3	4	5	6	7	8	9	10	11	12					
<i>Selenomonas infelix</i>	x																MCM-9, p. 911
<i>Selenomonas noxia</i>	x																MCM-9, p. 911
<i>Serratia ficaria</i>										x							MCM-9, p. 700, 702
<i>Serratia marcescens</i>										x							MCM-9, p. 700, 702
<i>Serratia odorifera</i>										x							MCM-9, p. 700, 702
<i>Serratia plymuthica</i>										x							MCM-9, p. 700, 702
<i>Serratia proteamaculans</i>										x							MCM-9, p. 700, 702
<i>Serratia rubidaea</i>										x							MCM-9, p. 700, 702
<i>Shigella boydii</i>												x					MCM-9, p. 679
<i>Shigella dysenteriae</i>												x					MCM-9, p. 678-679
<i>Shigella flexneri</i>												x					MCM-9, p. 678-679
<i>Shigella sonnei</i>																<i>Shigella sonnei</i>	
<i>Sphingomonas paucimobilis</i>										x							MCM-9, p. 786-787
<i>Spirillum minus</i>			x														MCM-9, p. 381-382
<i>Staphylococcus aureus</i>						x											MCM-9, p. 390, 392
<i>Staphylococcus epidermidis</i>						x											MCM-9, p. 390, 392
<i>Staphylococcus haemolyticus</i>						x											MCM-9, p. 390, 392
<i>Staphylococcus hyicus</i>						x											MCM-9, p. 390, 392
<i>Staphylococcus intermedius</i>						x											MCM-9, p. 390, 392
<i>Staphylococcus lugdunensis</i>						x											MCM-9, p. 390, 392
<i>Staphylococcus saprophyticus</i>						x											MCM-9, p. 390, 392
<i>Staphylococcus warneri</i>						x											MCM-9, p. 390, 392
<i>Stenotrophomonas maltophilia</i>										x							MCM-9, p. 750-751
<i>Streptobacillus moniliformis</i>				x													MCM-9, p. 621, 631
<i>Streptococcus acidominimus</i>						x											MCM-9, p. 414
<i>Streptococcus agalactiae</i>						x											MCM-9, p. 414
<i>Streptococcus anginosus</i>						x											MCM-9, p. 414
<i>Streptococcus bovis</i>						x											MCM-9, p. 414
<i>Streptococcus canis</i>						x											MCM-9, p. 414
<i>Streptococcus constellatus</i>						x											MCM-9, p. 414
<i>Streptococcus criceti</i>						x											MCM-9, p. 414
<i>Streptococcus equi</i>						x											MCM-9, p. 414
<i>Streptococcus gordonii</i>						x											MCM-9, p. 414
<i>Streptococcus intermedius</i>						x											MCM-9, p. 414
<i>Streptococcus milleri</i>						x											MCM-9, p. 414
<i>Streptococcus mitis</i>						x											MCM-9, p. 414
<i>Streptococcus mutans</i>						x											MCM-9, p. 414
<i>Streptococcus pneumoniae</i>						x											MCM-9, p. 414
<i>Streptococcus pyogenes</i>						x											MCM-9, p. 414
<i>Streptococcus salivarius</i>						x											MCM-9, p. 414
<i>Streptococcus sanguis</i>						x											MCM-9, p. 414
<i>Streptococcus sobrinus</i>						x											MCM-9, p. 414
<i>Streptococcus suis</i>						x											MCM-9, p. 414
<i>Streptococcus uberis</i>						x											MCM-9, p. 414
<i>Sutterella wadsworthensis</i>	x																MCM-9, p. 911
<i>Suttonella indologenes</i>						x											MCM-9, p. 621, 629

Attachment A: Screening to the PCCL

Bacteria	Screening Criteria Used for Exclusion												PCCL	Page Reference	
	1	2	3	4	5	6	7	8	9	10	11	12			
<i>Tatlockia maceachernii</i>													x		MCM-9, p. 835
<i>Tatlockia micdadei</i>													x		MCM-9, p. 835
<i>Tatumella ptyseos</i>									x						MCM-9, p. 701, 704
<i>Treponema carateum</i>									x						MCM-9, p. 988
<i>Treponema pallidum</i>			x												MCM-9, p. 988
<i>Tropheryma whippelii</i>										x					MCM-9, p. 1070-1071
<i>Tsukamurella inchonensis</i>										x					MCM-9, p. 520
<i>Tsukamurella paurometabola</i>										x					MCM-9, p. 520
<i>Tsukamurella pulmonis</i>										x					MCM-9, p. 520
<i>Tsukamurella tyrosinosolvans</i>										x					MCM-9, p. 520
<i>Ureaplasma urealyticum</i>		x													MCM-9, p. 1004-1007
<i>Veillonella atypica</i>	x														MCM-9, p. 862-863
<i>Veillonella dispar</i>	x														MCM-9, p. 862-863
<i>Veillonella parvula</i>	x														MCM-9, p. 862-863
<i>Vibrio alginolyticus</i>									x						MCM-9, p. 723
<i>Vibrio cholerae</i>														<i>Vibrio cholerae</i>	
<i>Vibrio cincinnatiensis</i>									x						MCM-9, p. 723
<i>Vibrio fluvialis</i>									x						MCM-9, p. 723
<i>Vibrio furnissii</i>									x						MCM-9, p. 723
<i>Vibrio hollisae</i>									x						MCM-9, p. 723
<i>Vibrio mimicus</i>									x						MCM-9, p. 723
<i>Vibrio parahaemolyticus</i>									x						MCM-9, p. 723
<i>Vibrio vulnificus</i>									x						MCM-9, p. 723
<i>Wolinella succinogenes</i>	x														MCM-9, p. 911
<i>Yersinia bercovieri</i>									x						MCM-9, p. 688
<i>Yersinia enterocolitica</i>														<i>Yersinia enterocolitica</i>	
<i>Yersinia frederiksenii</i>									x						MCM-9, p. 688
<i>Yersinia intermedia</i>									x						MCM-9, p. 688
<i>Yersinia kristensenii</i>									x						MCM-9, p. 688
<i>Yersinia mollaretii</i>									x						MCM-9, p. 688
<i>Yersinia pestis</i>					x										MCM-9, p. 689
<i>Yersinia pseudotuberculosis</i>										x					MCM-9, p. 689
<i>Yersinia rohdei</i>									x						MCM-9, p. 688
<i>Yersinia ruckeri</i>									x						MCM-9, p. 688
540 Bacteria	125	14	10	37	117	7	0	29	154	2	28	5	PCCL = 12		

*The bacteria identified by an asterisk were added to the microbial CCL universe by EPA as a result of nominations from the scientific community.

Attachment A: Screening to the PCCL

Viruses	Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
Andes virus														x			MCM-9, p. 1502
Apoi virus					x												Field's Virology, 5th Ed., p. 1153-1158, 1206
Australian bat lyssavirus					x												Field's Virology, 5th Ed., p. 1364
Bagaza virus					x												Field's Virology, 5th Ed., p. 1153-1158, 1199
Bangui virus					x												MCM-9, p. 1486-1491
Banna virus					x												MCM-9, p. 1486-1491
Banzi virus					x												MCM-9, p. 1486-1491
Barmah Forest virus					x												MCM-9, p. 1486-1491
Batken virus					x												http://phene.cpmc.columbia.edu/7thReport/sites/descriptions/Orthomyxoviridae/thogotovirus.htm
Bayou virus					x												MCM-9, p. 1501-1502
Bebaru virus					x												Field's Virology, 5th. Ed., p. 1024
Bhanja virus					x												MCM-9, p. 1486-1491
BK virus				x													MCM-9, p. 1612-1613
Black creek canal virus					x												MCM-9, p. 1501-1502
Borna disease virus							x										Field's Virology, 5th Ed., p. 1835
Bovine Ephemeral Fever virus					x												Field's Virology, 5th Ed., p. 1367
Bovine Papular Stomatitis virus				x													Field's Virology, 5th Ed., p. 2948, 2955-2956, 2963
Bovine Spongiform Encephalopathy (BSE) agent														x			MCM-9, p. 87-89
Buffalopox virus										x							Field's Virology, 5th Ed. p. 2955-2956
Bunyamwera virus					x												MCM-9, p. 1486-1491
Bussuquara virus					x												MCM-9, p. 1486-1491
Bwamba virus					x												MCM-9, p. 1486-1491
California encephalitis virus					x												MCM-9, p. 1486-1491
Candiru virus complex					x												MCM-9, p. 1486-1491
Caraparu virus					x												MCM-9, p. 1486-1491
Catu virus					x												MCM-9, p. 1486-1491
Cercopithecine herpes virus 1										x							Field's Virology, 5th Ed., p. 2895-2897
Chandipura virus					x												MCM-9, p. 1486-1491
Changuinola virus					x												MCM-9, p. 1486-1491
Chikungunya virus					x												MCM-9, p. 1486-1491
Chim virus					x												http://phene.cpmc.columbia.edu/ICTVdB/11000000.htm
Creutzfeld-Jakob Disease (CJD) agent										x							Field's Virology, 5th Ed., p. 443-444, 3077-3078
Colorado tick fever virus					x												MCM-9, p. 1486-1491
Cote d'Ivoire Ebola virus														x			Field's Virology, 5th. Ed., p. 619, 1411-1412, 1432-1434

Attachment A: Screening to the PCCL

Viruses	Notes	Screening Criteria Used for Exclusion												PCCL	Reference			
		1	2	3	4	5	6	7	8	9	10	11	12					
Cowpox virus														x			MCM-9, p. 1632	
Crimea-Congo Haemorrhagic Fever Virus														x			MCM-9, p. 1486-1491	
Dakar bat virus																x	Field's Virology, 5th Ed., p. 1158, 1206	
Dengue virus																x	MCM-9, p. 1486-1491	
Dhori virus																x	MCM-9, p. 1486-1491	
Dobrava-Belgrade virus																x	MCM-9, p. 1502	
Dugbe virus																x	MCM-9, p. 1486-1491	
Duvenhage virus																x	Field's Virology, 5th Ed., p. 1364	
Eastern equine encephalitis virus																x	MCM-9, p. 1486-1491	
Edge Hill virus																x	MCM-9, p. 1486-1491	
Encephalomyocarditis virus																x	Field's Virology, 5th Ed., p. 796, 840, 858-860	
European bat lyssavirus 1																x	Field's Virology, 5th Ed., p. 1364	
European bat lyssavirus 2																x	Field's Virology, 5th Ed., p. 1364	
European Tick-borne encephalitis virus																x	Field's Virology, 5th Ed., p. 1153-1158, 1200-1203	
Everglades virus																x	MCM-9, p. 1486-1491	
Eyach virus																x	Krauss et al., p. 87-89	
Far eastern Tick-borne encephalitis virus																x	Field's Virology, 5th Ed., p. 1153-1158, 1200-1203	
Foot and mouth disease virus																x	Field's Virology, 5th Ed., p. 796, 840, 858-860	
Ganjam virus																x	MCM-9, p. 1486-1491	
Getah virus																x	Field's Virology, 5th Ed., p. 1024	
Guama virus																x	MCM-9, p. 1486-1491	
Guanarito virus																x	MCM-9, p. 1512	
Guaroa virus																x	MCM-9, p. 1486-1491	
Hantaan virus																x	MCM-9, p. 1502	
Hendra virus																x	MCM-9, p. 1478-1479	
Hepatitis A virus																	Hepatitis A	
Hepatitis B virus																	x	MCM-9, p. 1641, 1643-1644
Hepatitis C virus																	x	MCM-9, p. 1437-1438
Hepatitis delta virus																	x	MCM-9, p. 1653
Hepatitis E virus																		Hepatitis E
Hepatitis G virus																	x	MCM-9, p. 1445-1447
HU39694 virus																	x	http://www.cdc.gov/ncidod/disease/s/hanta/hps/noframes/phys/ecology.htm
Hughes virus																	x	Field's Virology, 5th Ed., p. 1743-1745
Human adenovirus A																		Adenovirus
Human adenovirus B																	x	MCM-9, p. 1589-1591
Human adenovirus C																	x	MCM-9, p. 1589-1591
Human adenovirus D																	x	MCM-9, p. 1589-1591

Attachment A: Screening to the PCCL

Viruses	Notes	Screening Criteria Used for Exclusion												PCCL	Reference	
		1	2	3	4	5	6	7	8	9	10	11	12			
Human adenovirus E							x									MCM-9, p. 1589-1591
Human adenovirus F														x		MCM-9, p. 1589-1591
Human astrovirus																Astrovirus
Human Coronavirus 229E							x									MCM-9, p. 1414-1415
Human Coronavirus OC43							x									MCM-9, p. 1414-1415
Human enterovirus 68	Human enterovirus D													x		MCM-9, p. 1392-1394
Human enterovirus 70	Human enterovirus D													x		MCM-9, p. 1392-1394
Human enterovirus A																Enterovirus
Human enterovirus B														x		MCM-9, p. 1392-1394
Human enterovirus C														x		MCM-9, p. 1392-1394
Human enterovirus D														x		MCM-9, p. 1392-1394
Human Herpesvirus 1				x												MCM-9, p. 1524
Human Herpesvirus 2				x												MCM-9, p. 1524
Human Herpesvirus 3				x												MCM-9, p. 1524
Human Herpesvirus 4				x												MCM-9, p. 1524
Human Herpesvirus 5				x												MCM-9, p. 1524
Human Herpesvirus 6				x												MCM-9, p. 1524
Human Herpesvirus 7				x												MCM-9, p. 1524
Human Herpesvirus 8				x												MCM-9, p. 1524
Human Immunodeficiency Virus 1				x												MCM-9, p. 1309-1310
Human Immunodeficiency Virus 2				x												MCM-9, p. 1309-1310
Human papillomavirus				x												MCM-9, p. 1601
Human parainfluenza virus 1				x												MCM-9, p. 1352
Human parainfluenza virus 2							x									MCM-9, p. 1352
Human parainfluenza virus 3							x									MCM-9, p. 1352
Human parainfluenza virus 4							x									MCM-9, p. 1352
Human parechovirus type 1										x						MCM-9, p. 1393-1394
Human parechovirus type 2											x					MCM-9, p. 1393-1394
Human Respiratory Syncytial virus							x									MCM-9, p. 1361-1362
Human Rhinovirus A							x									MCM-9, p. 1405-1406
Human Rhinovirus B							x									MCM-9, p. 1405-1406
Human T-Lymphotropic Virus 1				x												MCM-9, p. 1330-1331
Igbo-ora virus					x											Field's Virology, 5th Ed., p. 1024, 1048
Ilheus virus						x										MCM-9, p. 1486-1491
Influenza A virus							x									MCM-9, p. 1340-1341
Influenza B virus							x									MCM-9, p. 1340-1341
Influenza C virus							x									MCM-9, p. 1340-1341
Issyk-Kul virus						x										MCM-9, p. 1486-1491
Japanese encephalitis virus								x								MCM-9, p. 1486-1491
JC virus				x												MCM-9, p. 1612-1613
Junin virus				x												MCM-9, p. 1512
Juquitiba virus						x										Field's Virology, 5th Ed., p. 1743-1745

Attachment A: Screening to the PCCL

Viruses	Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
Karshi virus														x			MCM-9, p. 1486-1491
Kasokero virus					x												http://phene.cpmc.columbia.edu/IC_TVdB/11000000.htm
Kedougou virus					x												Field's Virology, 5th Ed., p. 1153-1158, 1199
Kemerovo virus					x												MCM-9, p. 1486-1491
Kokobera virus					x												MCM-9, p. 1486-1491
Koutango virus					x												MCM-9, p. 1486-1491
Kyasanur forest disease virus					x												MCM-9, p. 1486-1491
Laguna Negra virus														x			MCM-9, p. 1502
Lanjan virus					x												http://phene.cpmc.columbia.edu/IC_TVdB/11000000.htm
Lassa virus														x			MCM-9, p. 1512
Lebombo virus					x												MCM-9, p. 1486-1491
Lechiguanas virus					x												http://phene.cpmc.columbia.edu/7thReport/sites/descriptions/Bunyaviridae/hantavirus.htm
Louping ill virus					x												MCM-9, p. 1486-1491
Lymphocytic choriomeningitis virus										x							MCM-9, p. 1512
Machupo virus														x			MCM-9, p. 1512
Madrid virus					x												MCM-9, p. 1486-1491
Marburg virus				x													MCM-9, p. 1512
Marituba virus					x												MCM-9, p. 1486-1491
Mayaro virus					x												MCM-9, p. 1486-1491
Measles virus								x									MCM-9, p. 1378-1379
Menangle virus														x			http://www.cdc.gov/ncidod/eid/vol4no2/philbey.htm
Mimivirus ¹																x	Field's Virology, 5th Ed., p. 627-628, 637-638
Mokola virus					x												Field's Virology, 5th Ed., p. 1363-1364
Molluscum contagiosum virus				x													MCM-9, p. 1631-1632
Monkeypox virus														x			MCM-9, p. 1631-1632
Monongahela virus					x												http://phene.cpmc.columbia.edu/7thReport/sites/descriptions/Bunyaviridae/hantavirus.htm
Mucambo virus					x												MCM-9, p. 1486-1491
Mumps virus				x													MCM-9, p. 1352
Murray Valley encephalitis virus					x												MCM-9, p. 1486-1491
New York virus					x												MCM-9, p. 1501-1502
Newcastle disease virus								x									Field's Virology, 5th Ed., p. 1497-1498
Nipah virus														x			MCM-9, p. 1478-1479
Norwalk-like viruses																	Calicivirus
Nyando virus					x												MCM-9, p. 1486-1491
Ockelbo virus					x												MCM-9, p. 1486-1491

Attachment A: Screening to the PCCL

Viruses	Notes	Screening Criteria Used for Exclusion												PCCL	Reference	
		1	2	3	4	5	6	7	8	9	10	11	12			
Omsk haemorrhagic fever virus					x											MCM-9, p. 1486-1491
O'nyong-nyong virus					x											MCM-9, p. 1486-1491
Oran virus																http://phene.cpmc.columbia.edu/7thReport/sites/descriptions/Bunyaviridae/hantavirus.htm
Orf virus												x				MCM-9, p. 1631-1640
Oriboca virus					x											MCM-9, p. 1486-1491
Oropouche virus					x											MCM-9, p. 1486-1491
Orungo virus					x											MCM-9, p. 1486-1491
Parvovirus B19							x									MCM-9, p. 1623
Phnom-Penh bat virus																Field's Virology, 5th Ed., p. 1153-1158, 1206
Picobirnavirus																MCM-9, p. 1456-1457
Piry virus					x											MCM-9, p. 1486-1491
Poliovirus	Human enterovirus													x		MCM-9, p. 1392-1394
Powassan virus					x											MCM-9, p. 1486-1491
Pseudocowpox virus				x												Field's Virology, 5th Ed., p. 2948, 2960, 2963
Punta Toro virus					x											MCM-9, p. 1486-1491
Puumala virus													x			MCM-9, p. 1502
Quaranfil Virus					x											MCM-9, p. 1486-1491
Rabies virus									x							MCM-9, p. 1471
Reovirus ²																Field's Virology, 5th Ed., p. 1897-1900
Reston Ebola virus														x		MCM-9, p. 1512
Rift Valley fever virus														x		MCM-9, p. 1486-1491
Rio Bravo virus																Field's Virology, 5th Ed., p. 1153-1158, 1206
Rocio virus					x											MCM-9, p. 1486-1491
Ross River virus					x											MCM-9, p. 1486-1491
Rotavirus A																Rotavirus
Rotavirus B														x		MCM-9, p. 1456-1457
Rotavirus C														x		MCM-9, p. 1456-1457
Rotavirus D														x		MCM-9, p. 1456-1457
Rotavirus E														x		MCM-9, p. 1456-1457
Rotavirus F														x		MCM-9, p. 1456-1457
Royal Farm virus					x											Field's Virology, 5th Ed., p. 1153-1158, 1204
Rubella virus									x							MCM-9, p. 1384
Sabia virus														x		MCM-9, p. 1512
Saimiriine herpesvirus 1																Field's Virology, 4th Ed., p. 2383, 2483, 2511, 2848
Salehabad virus					x											http://phene.cpmc.columbia.edu/ICTVdB/11041008.htm
Sandfly fever Naples virus					x											MCM-9, p. 1486-1491

Attachment A: Screening to the PCCL

Viruses	Notes	Screening Criteria Used for Exclusion												PCCL	Reference	
		1	2	3	4	5	6	7	8	9	10	11	12			
Sandfly fever virus group					x											MCM-9, p. 1486-1491
Saumarez Reef virus					x											Field's Virology, 5th Ed., p. 1153-1158, 1206
Sealpox virus									x							MCM-9, p. 1632, 1634
Semliki Forest virus					x											MCM-9, p. 1486-1491
Seoul virus					x											MCM-9, p. 1501-1502
Sepik virus											x					MCM-9, p. 1486-1491
Sin Nombre virus					x											MCM-9, p. 1501-1502
Sindbis virus											x					MCM-9, p. 1486-1491
St. Louis encephalitis virus					x											MCM-9, p. 1486-1491
Sudan Ebola virus											x					MCM-9, p. 1512
Suid herpesvirus												x				Field's Virology, 4th Ed., p. 2385, 2484, 2707
Swine vesicular disease virus	Vesicular exanthema of swine												x			Field's Virology, 5th Ed., p. 963
Tacaiuma virus					x											MCM-9, p. 1486-1491
Tamdy virus					x											MCM-9, p. 1486-1491
Tanapox virus												x				MCM-9, p. 1632, 1634
Tataguine virus					x											MCM-9, p. 1486-1491
Thogoto virus					x											MCM-9, p. 1486-1491
Trubanaman virus					x											MCM-9, p. 1486-1491
Tyuleniy virus					x											Field's Virology, 5th Ed., p. 1153-1158, 1206
Usutu virus					x											MCM-9, p. 1486-1491
Variola virus				x												MCM-9, p. 1631-1632
Venezuelan Equine Encephalitis virus					x											MCM-9, p. 1486-1491
Vesicular stomatitis virus					x											MCM-9, p. 1486-1491
Wad Medani virus					x											Field's Virology, 5th Ed., p. 1975-1977
Wanowrie virus					x											MCM-9, p. 1486-1491
Wesselsbron virus					x											MCM-9, p. 1486-1491
West Nile virus					x											MCM-9, p. 1486-1491
Western Equine Encephalitis virus					x											MCM-9, p. 1486-1491
Wyeomyia virus					x											MCM-9, p. 1486-1491
Yaba monkey tumor virus												x				MCM-9, p. 1632
Yellow fever virus					x											MCM-9, p. 1486-1491
Yogue virus					x											http://phene.cpmc.columbia.edu/IC_TVdB/11000000.htm
Zaire Ebola virus												x				MCM-9, p. 1512
Zika virus												x				MCM-9, p. 1486-1491
Zinga virus					x											http://www.cdc.gov/mmwr/preview/mmwrhtml/00001253.htm
219 Viruses		0	0	26	104	0	19	1	18	0	36	8	0	PCCL = 7		

¹This virus-like agent was added to the microbial CCL universe by EPA as a result of nominations from the scientific community.²This virus group was added to the microbial CCL universe by EPA.

Attachment A: Screening to the PCCL

Protozoa	Screening Criteria Used for Exclusion												PCCL	Reference		
	1	2	3	4	5	6	7	8	9	10	11	12				
<i>Acanthamoeba astronyxis</i>									x							MCM-9, p. 2082
<i>Acanthamoeba castellanii</i>										x						MCM-9, p. 2082-2084
<i>Acanthamoeba culbertsoni</i>										x						MCM-9, p. 2082-2084
<i>Acanthamoeba hatchetti</i>											x					MCM-9, p. 2082
<i>Acanthamoeba palestinensis</i>												x				MCM-9, p. 2082, Krauss et al., p. 264-268
<i>Acanthamoeba polyphaga</i>													x			MCM-9, p. 2082
<i>Acanthamoeba rhysoides</i>														x		MCM-9, p. 2082
<i>Babesia bovis</i>					x											MCM-9, p. 2051
<i>Babesia divergens</i>					x											MCM-9, p. 2051
<i>Babesia gibsoni</i>					x											MCM-9, p. 2051
<i>Babesia microti</i>					x											MCM-9, p. 2051
<i>Balamuthia mandrillaris</i>													x			MCM-9, p. 2030, 2084
<i>Balantidium coli</i>														x		MCM-9, p. 2106-2107
<i>Blastocystis hominis</i>																<i>Blastocystis hominis</i>
<i>Cryptosporidium parvum</i> ¹																
<i>Cyclospora cayetanensis</i>																<i>Cyclospora cayetanensis</i>
<i>Dientamoeba fragilis</i>										x						MCM-9, p. 2103-2104
<i>Encephalitozoon cuniculi</i>														x		MCM-9 p. 2133-2135
<i>Encephalitozoon hellem</i>														x		MCM-9 p. 2133-2135
<i>Encephalitozoon intestinalis</i>																Microsporidia
<i>Entamoeba chattoni</i>															x	http://www.itg.be/itg/DistanceLearning/LectureNotes/VandenEndenE/06_Amoebiasisp2.htm#IX_450
<i>Entamoeba histolytica</i>																<i>Entamoeba histolytica</i>
<i>Entamoeba moshkovskii</i>															x	http://www.itg.be/itg/DistanceLearning/LectureNotes/VandenEndenE/06_Amoebiasisp2.htm#IX_450
<i>Enterocytozoon bieneusi</i>														x		MCM-9 p. 2133-2135
<i>Giardia duodenalis</i> ¹																
<i>Isospora belli</i>																<i>Isospora belli</i>
<i>Leishmania aethiopica</i>					x											MCM-9, p. 2057-2158
<i>Leishmania amazonensis</i>					x											MCM-9, p. 2057-2158
<i>Leishmania braziliensis</i>					x											MCM-9, p. 2057-2158
<i>Leishmania chagasi</i>					x											MCM-9, p. 2057-2158
<i>Leishmania donovani</i>					x											MCM-9, p. 2057-2158
<i>Leishmania guyanensis</i>																MCM-9, p. 2057-2158, Krauss et al., p. 282-284
					x											
<i>Leishmania infantum</i>					x											MCM-9, p. 2057-2058
<i>Leishmania lainsoni</i>					x											MCM-9, p. 2057-2058
<i>Leishmania major</i>					x											MCM-9, p. 2057-2058
<i>Leishmania mexicana</i>					x											MCM-9, p. 2057-2058
<i>Leishmania naiffi</i>					x											MCM-9, p. 2057-2058
<i>Leishmania panamensis</i>					x											MCM-9, p. 2057-2058
<i>Leishmania peruviana</i>					x											MCM-9, p. 2057-2058
<i>Leishmania pifanoi</i>					x											MCM-9, p. 2057-2058
<i>Leishmania shawi</i>					x											MCM-9, p. 2057-2058

Attachment A: Screening to the PCCL

Protozoa	Screening Criteria Used for Exclusion												PCCL	Reference		
	1	2	3	4	5	6	7	8	9	10	11	12				
<i>Leishmania tropica</i>				x												MCM-9, p. 2057-2058
<i>Leishmania venezuelensis</i>				x												MCM-9, p. 2057-2058
<i>Naegleria fowleri</i>																<i>Naegleria fowleri</i>
<i>Nosema africanum</i>																MCM-9, p. 2133-2135, Palmer et al., p. 609
<i>Nosema ceylonensis</i>																MCM-9, p. 2133-2135, Palmer et al., p. 609
<i>Nosema connori</i>																MCM-9, p. 2133-2135, Palmer et al., p. 609
<i>Nosema ocularum</i>																MCM-9, p. 2133-2135
<i>Pentatrichomonas hominis</i>					x											MCM-9, p. 2093
<i>Plasmodium falciparum</i>				x												MCM-9, p. 2040
<i>Plasmodium knowlesi</i>				x												MCM-9, p. 2040
<i>Plasmodium malariae</i>				x												MCM-9, p. 2040
<i>Plasmodium ovale</i>				x												MCM-9, p. 2040
<i>Plasmodium simium</i>				x												MCM-9, p. 2040
<i>Plasmodium vivax</i>				x												MCM-9, p. 2040
<i>Retortamonas intestinalis</i>					x											MCM-9, p. 2093
<i>Sarcocystis hominis</i>										x						MCM-9, p. 2114-2115
<i>Sarcocystis lindermanni</i>										x						MCM-9, p. 2114-2115
<i>Sarcocystis suihominis</i>										x						MCM-9, p. 2114-2115
<i>Toxoplasma gondii</i>																<i>Toxoplasma gondii</i>
<i>Trachipleistophora hominis</i>														x		MCM-9 p. 2133-2134
<i>Trichomonas tenax</i>					x											MCM-9, p. 2032, 2034, 2093
<i>Trichomonas vaginalis</i>			x													MCM-9, p. 2104-2105
<i>Trypanosoma brucei</i>				x												MCM-9, p. 2057-2058
<i>Trypanosoma cruzi</i>				x												MCM-9, p. 2057-2058
<i>Vittaforma corneae</i>															x	MCM-9 p. 2133-2134
66 Protozoa	0	0	1	29	3	0	4	7	7	0	6	0				PCCL = 7

¹ *Cryptosporidium* and *Giardia* are considered to be regulated by the Long Term Surface Water Treatment Rule (LT-2). These organisms are not listed on CCL3.

Attachment A: Screening to the PCCL

Helminths	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Acanthocephalus rauschi</i>								x									Ashford and Crewe, 2003, p. 93
<i>Achillurbainia nouveli</i>													x				Ashford and Crewe, 2003, p. 49
<i>Achillurbainia recondita</i>								x									Ashford and Crewe, 2003, p. 50
<i>Alaria americana</i>								x									Ashford and Crewe, 2003, p. 29
<i>Alaria marcianae</i>								x									Ashford and Crewe, 2003, p. 30
<i>Amphimerus pseudofelineus</i>	<i>Opisthorchis quayaquilensis</i>												x				Ashford and Crewe, 2003, p. 46
<i>Anatrichosoma cutaneum</i>													x				Ashford and Crewe, 2003, p. 88
<i>Ancylostoma braziliense</i>								x									Ashford and Crewe, 2003, p. 68
<i>Ancylostoma caninum</i>													x				Ashford and Crewe, 2003, p. 69
<i>Ancylostoma ceylanicum</i>													x				Ashford and Crewe, 2003, p. 69
<i>Ancylostoma duodenale</i>								x									Ashford and Crewe, 2003, p. 69
<i>Ancylostoma malayanum</i>													x				Ashford and Crewe, 2003, p. 69
<i>Anisakis physeteris</i>								x									Ashford and Crewe, 2003, p.75
<i>Anisakis simplex</i>								x									Ashford and Crewe, 2003, p. 75
<i>Aonchotheca philippinensis</i>	<i>Paracapillaria philippinensis</i>												x				Ashford and Crewe, 2003, p. 89
<i>Apophallus donicus</i>								x									Ashford and Crewe, 2003, p. 40
<i>Artyfechinostomum mehrai</i>	<i>Artyfechinostomum malayanum</i>												x				Ashford and Crewe, 2003, p. 35
<i>Ascaris lumbricoides</i>								x									Ashford and Crewe, 2003, p. 76
<i>Ascaris suum</i>								x									Ashford and Crewe, 2003, p. 77
<i>Ascocotyle sp.</i>	<i>Phagicola longa</i>							x									Ashford and Crewe, 2003, p. 44
<i>Australobilharzia terrigalensis</i>													x				Ashford and Crewe, 2003, p. 31
<i>Baylisascaris procyonis</i>								x									Ashford and Crewe, 2003, p. 77
<i>Bertiella mucronata</i>								x									Ashford and Crewe, 2003, p. 59
<i>Bertiella studeri</i>													x				Ashford and Crewe, 2003, p. 59
<i>Bilharziella polonica</i>													x				Ashford and Crewe, 2003, p. 31
<i>Bolbosoma sp.</i>													x				Ashford and Crewe, 2003, p. 93
<i>Brugia beaveri</i>					x												Ashford and Crewe, 2003, p. 81
<i>Brugia guyanensis</i>					x												Ashford and Crewe, 2003, p. 81
<i>Brugia malayi</i>					x												Ashford and Crewe, 2003, p. 82
<i>Brugia pahangi</i>					x												Ashford and Crewe, 2003, p. 82
<i>Brugia timori</i>					x												Ashford and Crewe, 2003, p. 82
<i>Bunostomum phlebotomum</i>								x									Ashford and Crewe, 2003, p. 112
<i>Calodium hepaticum</i>								x									Ashford and Crewe, 2003, p. 89
<i>Carneocephallus brevicæa</i>													x				Ashford and Crewe, 2003, p. 47
<i>Cathaemasia cabrerai</i>													x				Ashford and Crewe, 2003, p. 35
<i>Centrocestus armatus</i>													x				Ashford and Crewe, 2003, p. 40
<i>Centrocestus formosanus</i>													x				Ashford and Crewe, 2003, p. 41
<i>Cheilospirura sp.</i>													x				Ashford and Crewe, 2003, p. 81
<i>Clinostomum complanatum</i>													x				Ashford and Crewe, 2003, p. 29
<i>Contraecum osculatum</i>													x				Ashford and Crewe, 2003, p. 76
<i>Corynosoma strumosum</i>								x									Ashford and Crewe, 2003, p. 93
<i>Cryptocotyle lingua</i>													x				Ashford and Crewe, 2003, p. 41
<i>Cyclodontostomum purvisi</i>													x				Ashford and Crewe, 2003, p. 69

Attachment A: Screening to the PCCL

		Screening Criteria Used for Exclusion													
Helminths	Synonyms and Notes	1	2	3	4	5	6	7	8	9	10	11	12	PCCL	Reference
<i>Dicrocoelium dendriticum</i>								x							Ashford and Crewe, 2003, p. 47
<i>Dicrocoelium hospes</i>											x				Ashford and Crewe, 2003, p. 48
<i>Dioctophyme renale</i>								x							Ashford and Crewe, 2003, p. 87
<i>Dipetalonema arbuta</i>					x										Ashford and Crewe, 2003, p. 83
<i>Dipetalonema reconditum</i>					x										MCM-8, p. 634, 1209
<i>Diphyllobothrium cameroni</i>											x				Ashford and Crewe, 2003, p. 55
<i>Diphyllobothrium cordatum</i>								x							Ashford and Crewe, 2003, p. 55
<i>Diphyllobothrium dalliae</i>								x							Ashford and Crewe, 2003, p. 55
<i>Diphyllobothrium dendriticum</i>								x							Ashford and Crewe, 2003, p. 55
<i>Diphyllobothrium elegans</i>											x				Ashford and Crewe, 2003, p. 55
<i>Diphyllobothrium erinaceieuropaei</i>	<i>Spirometra erinaceieuropaei</i> , <i>Spirometra erinacei</i> , <i>Prometra mansoni</i>											x			Ashford and Crewe, 2003, p. 58
<i>Diphyllobothrium hians</i>											x				Ashford and Crewe, 2003, p. 55
<i>Diphyllobothrium houghtoni</i>	<i>Spirometra houghtoni</i>											x			Ashford and Crewe, 2003, p. 58
<i>Diphyllobothrium klebanovskii</i>												x			Ashford and Crewe, 2003, p. 56
<i>Diphyllobothrium lanceolatum</i>								x							Ashford and Crewe, 2003, p. 56
<i>Diphyllobothrium latum</i>								x							Ashford and Crewe, 2003, p. 56
<i>Diphyllobothrium mansonoides</i>	<i>Spirometra mansonoides</i>							x							Ashford and Crewe, 2003, p. 58
<i>Diphyllobothrium nihonkaiense</i>												x			Ashford and Crewe, 2003, p. 56
<i>Diphyllobothrium orcini</i>	Note: limited information available											x			Ashford and Crewe, 2003, p. 56
<i>Diphyllobothrium pacificum</i>												x			Ashford and Crewe, 2003, p. 56
<i>Diphyllobothrium scoticum</i>												x			Ashford and Crewe, 2003, p. 57
<i>Diphyllobothrium stemmacephalum</i>	<i>Diphyllobothrium yonagoensis</i>							x							Ashford and Crewe, 2003, p. 57
<i>Diphyllobothrium theileri</i>	<i>Spirometra theileri</i>											x			Ashford and Crewe, 2003, p. 58
<i>Diplogonoporus balaenopterae</i>	<i>Diplogonoporus grandis</i>											x			Ashford and Crewe, 2003, p. 57
<i>Diplogonoporus brauni</i>												x			Ashford and Crewe, 2003, 57
<i>Diplogonoporus fukuokaensis</i>												x			Ashford and Crewe, 2003, 57
<i>Diplostomum spathaceum</i>												x			Ashford and Crewe, 2003, p. 30
<i>Dipylidium caninum</i>								x							Ashford and Crewe, 2003, p. 60
<i>Dirofilaria immitis</i>					x										Ashford and Crewe, 2003, p. 83
<i>Dirofilaria repens</i>					x										Ashford and Crewe, 2003, p. 83
<i>Dirofilaria striata</i>					x										Ashford and Crewe, 2003, p. 83
<i>Dirofilaria subdermata</i>	<i>Dirofilaria ursi</i>				x										Ashford and Crewe, 2003, p. 84
<i>Dirofilaria tenuis</i>					x										Ashford and Crewe, 2003, p. 84
<i>Dirofilaria ursi</i>	<i>Dirofilaria subdermata</i>				x										Ashford and Crewe, 2003, p. 84
<i>Dracunculus insignis</i>	<i>Dracunculus medinensis</i>											x			Ashford and Crewe, 2003, p. 78
<i>Dracunculus medinensis</i>												x			Ashford and Crewe, 2003, p. 78
<i>Drepanidotaenia lanceolata</i>								x							Ashford and Crewe, 2003, p. 61
<i>Echinochasmus japonicus</i>												x			Ashford and Crewe, 2003, p. 35
<i>Echinochasmus jiufuensis</i>												x			Ashford and Crewe, 2003, p. 36
<i>Echinochasmus perfoliatus</i>												x			Ashford and Crewe, 2003, p. 36
<i>Echinococcus granulosus</i>								x							Ashford and Crewe, 2003, p. 62

Attachment A: Screening to the PCCL

Helminths	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Echinococcus multilocularis</i>								x									Ashford and Crewe, 2003, p. 62
<i>Echinococcus oligarthus</i>													x				Ashford and Crewe, 2003, p. 62
<i>Echinococcus vogeli</i>													x				Ashford and Crewe, 2003, p. 62
<i>Echinoparyphium recurvatum</i>													x				Ashford and Crewe, 2003, p. 36
<i>Echinostoma cinetorchis</i>													x				Ashford and Crewe, 2003, p. 36
<i>Echinostoma echinatum</i>													x				Ashford and Crewe, 2003, p. 37
<i>Echinostoma hortense</i>													x				Ashford and Crewe, 2003, p. 37
<i>Echinostoma ilocanum</i>													x				Ashford and Crewe, 2003, p. 37
<i>Echinostoma jassyense</i>	<i>Echinostoma melis</i>												x				Ashford and Crewe, 2003, p. 38
<i>Echinostoma macrorchis</i>													x				Ashford and Crewe, 2003, p. 37
<i>Echinostoma malayanum</i>													x				Ashford and Crewe, 2003, p. 38
<i>Echinostoma revolutum</i>													x				Ashford and Crewe, 2003, p. 38
<i>Enterobius gregorii</i>								x									Ashford and Crewe, 2003, p. 75
<i>Enterobius vermicularis</i>								x									Ashford and Crewe, 2003, p. 75
<i>Episthmium caninum</i>													x				Ashford and Crewe, 2003, p. 38
<i>Eucoleus aerophilus</i>								x									Ashford and Crewe, 2003, p. 89
<i>Eurytrema pancreaticum</i>								x									Ashford and Crewe, 2003, p. 48
<i>Eustrongylides sp.</i>								x									Ashford and Crewe, 2003, p. 87
<i>Fasciola gigantica</i>								x									Ashford and Crewe, 2003, p. 39
<i>Fasciola hepatica</i>								x									Ashford and Crewe, 2003, p. 39
<i>Fasciola indica</i>	<i>Fasciola gigantica</i>							x									Ashford and Crewe, 2003, p. 39
<i>Fasciolopsis buski</i>													x				Ashford and Crewe, 2003, p. 39
<i>Fibricola seoulensis</i>	<i>Neodiplostomum seoulense</i>												x				Ashford and Crewe, 2003, p. 30
<i>Gastrodiscoides hominis</i>													x				Ashford and Crewe, 2003, p. 40
<i>Gigantobilharzia huttoni</i>								x									Ashford and Crewe, 2003, p. 31
<i>Gigantobilharzia sturniae</i>													x				Ashford and Crewe, 2003, p. 32
<i>Gnathostoma doloresi</i>													x				Ashford and Crewe, 2003, p. 78
<i>Gnathostoma hispidum</i>													x				Ashford and Crewe, 2003, p. 79
<i>Gnathostoma nipponicum</i>													x				Ashford and Crewe, 2003, p. 79
<i>Gnathostoma spinigerum</i>								x									Ashford and Crewe, 2003, p. 79
<i>Gongylonema pulchrum</i>								x									Ashford and Crewe, 2003, p. 80
<i>Gymnophalloides sp.</i>	<i>Fischeröderius elongatus</i>												x				Ashford and Crewe, 2003, p. 40, 138
<i>Haemonchus contortus</i>													x				Ashford and Crewe, 2003, p. 71
<i>Haplorchis pumilo</i>													x				Ashford and Crewe, 2003, p. 42
<i>Haplorchis taichui</i>													x				Ashford and Crewe, 2003, p. 42
<i>Haplorchis vanissima</i>								x									Ashford and Crewe, 2003, p. 42
<i>Haplorchis yokogawai</i>								x									Ashford and Crewe, 2003, p. 42
<i>Heterobilharzia americana</i>								x									Ashford and Crewe, 2003, p. 32
<i>Heterophyes dispar</i>													x				Ashford and Crewe, 2003, p. 43
<i>Heterophyes heterophyes</i>													x				Ashford and Crewe, 2003, p. 43
<i>Heterophyes nocens</i>													x				Ashford and Crewe, 2003, p. 43
<i>Heterophyopsis continua</i>													x				Ashford and Crewe, 2003, p. 43
<i>Himasthala muehlensi</i>								x									Ashford and Crewe, 2003, p. 38
<i>Hymenolepis diminuta</i>								x									Ashford and Crewe, 2003, p. 61

Attachment A: Screening to the PCCL

Helminths	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Hymenolepis nana</i>								x									Ashford and Crewe, 2003, p. 61
<i>Hypoderma conoideum</i>														x			Ashford and Crewe, 2003, p. 39
<i>Inermicapsifer madagascariensis</i>															x		Ashford and Crewe, 2003, p. 59
<i>Isoparorchis hypselobagri</i>														x			Ashford and Crewe, 2003, p. 31
<i>Lagochilascaris minor</i>									x								Ashford and Crewe, 2003, p. 77
<i>Ligula intestinalis</i>														x			Ashford and Crewe, 2003, p. 57
<i>Loa loa</i>					x												Ashford and Crewe, 2003, p. 84
<i>Macracanthorhynchus hirudinaceus</i>															x		Ashford and Crewe, 2003, p. 93
<i>Macracanthorhynchus ingens</i>										x							Ashford and Crewe, 2003, p. 93
<i>Mammomonogamus laryngeus</i>														x			Ashford and Crewe, 2003, p. 71
<i>Mammomonogamus nasicola</i>														x			Ashford and Crewe, 2003, p. 71
<i>Mansonella ozzardi</i>					x												Ashford and Crewe, 2003, p. 85
<i>Mansonella perstans</i>					x												Ashford and Crewe, 2003, p. 85
<i>Mansonella rodhaini</i>					x												Ashford and Crewe, 2003, p. 85
<i>Mansonella semiclarum</i>	<i>Microfilaria semiclarum</i>				x												Ashford and Crewe, 2003, p. 86
<i>Mansonella streptocerca</i>					x												Ashford and Crewe, 2003, p. 85
<i>Marshallagia marshalli</i>														x			Ashford and Crewe, 2003, p. 71
<i>Mathevotaenia symmetrica</i>														x			Ashford and Crewe, 2003, p. 60
<i>Mecistocirrus digitatus</i>	Note: Original publication ambiguous, probably not a human pathogen.															x	Ashford and Crewe, 2003, p. 113
<i>Meningonema peruzzii</i>														x			Ashford and Crewe, 2003, p. 85
<i>Mesocestoides lineatus</i>														x			Ashford and Crewe, 2003, p. 61
<i>Mesocestoides variabilis</i>															x		Ashford and Crewe, 2003, p. 62
<i>Metagonimus minutus</i>														x			Ashford and Crewe, 2003, p. 44
<i>Metagonimus yokogawai</i>														x			Ashford and Crewe, 2003, p. 44
<i>Metastrongylus elongatus</i>															x		Ashford and Crewe, 2003, p. 74
<i>Metorchis albidus</i>															x		Ashford and Crewe, 2003, p. 46
<i>Metorchis conjunctus</i>															x		Ashford and Crewe, 2003, p. 46
<i>Microfilaria bolivarensis</i>					x												Ashford and Crewe, 2003, p. 85
<i>Micronema deletrix</i>	<i>Halicephalobus gingivalis</i>															x	Ashford and Crewe, 2003, p. 67
<i>Moniezia expansa</i>																x	Ashford and Crewe, 2003, p. 60
<i>Moniliformis moniliformis</i>																x	Ashford and Crewe, 2003, p. 94
<i>Multiceps brauni</i>	<i>Taenia brauni</i>															x	Ashford and Crewe, 2003, p. 62
<i>Multiceps glomeratus</i>																x	Ashford and Crewe, 2003, p. 63
<i>Multiceps longihamatus</i>																x	Ashford and Crewe, 2003, p. 63
<i>Multiceps multiceps</i>																x	Ashford and Crewe, 2003, p. 63
<i>Multiceps serialis</i>																x	Ashford and Crewe, 2003, p. 63
<i>Nanophyetus salmincola</i>																x	Ashford and Crewe, 2003, p. 52
<i>Necator americanus</i>																x	Ashford and Crewe, 2003, p. 70
<i>Nematodirus abnormalis</i>	Note: Unreliably identified, probably not a human pathogen.															x	Ashford and Crewe, 2003, p. 113
<i>Neodiplostomum sp.</i>	<i>Fibricola seoulensis</i>															x	Ashford and Crewe, 2003, p. 30

Attachment A: Screening to the PCCL

Helminths	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Oesophagostomum aculeatum</i>											x						Ashford and Crewe, 2003, p. 70
<i>Oesophagostomum bifurcum</i>											x						Ashford and Crewe, 2003, p. 70
<i>Oesophagostomum stephanostomum</i>								x									Ashford and Crewe, 2003, p. 70
<i>Onchocerca volvulus</i>					x												Ashford and Crewe, 2003, p. 86
<i>Opisthorchis (Chlonorchis) sinensis</i>	<i>Clonorchis sinensis</i>										x						Ashford and Crewe, 2003, p. 46
<i>Opisthorchis felineus</i>											x						Ashford and Crewe, 2003, p. 46
<i>Opisthorchis guayaquilensis</i>								x									Ashford and Crewe, 2003, p. 46
<i>Opisthorchis noverca</i>	Note: Doubtful record, probably not a human pathogen.							x									Ashford and Crewe, 2003, p. 110
<i>Opisthorchis viverrini</i>											x						Ashford and Crewe, 2003, p. 47
<i>Orientobilharzia turkestanica</i>											x						Ashford and Crewe, 2003, p. 32
<i>Ornithobilharzia sp.</i>											x						Kolářová, 2007
<i>Ostertagia ostertagi</i>											x						Ashford and Crewe, 2003, p. 71
<i>Paragonimus africanus</i>											x						Ashford and Crewe, 2003, p. 50
<i>Paragonimus bankokensis</i>	Note: Human infection unknown							x									Ashford and Crewe, 2003, p. 110
<i>Paragonimus caliensis</i>	Note: Human infection unknown							x									Ashford and Crewe, 2003, p. 111
<i>Paragonimus heterotremus</i>											x						Ashford and Crewe, 2003, p. 50
<i>Paragonimus hueitungensis</i>	<i>Paragonimus skrjabini</i>										x						Ashford and Crewe, 2003, p. 51
<i>Paragonimus kellicotti</i>								x									Ashford and Crewe, 2003, p. 50
<i>Paragonimus mexicanus</i>								x									Ashford and Crewe, 2003, p. 50
<i>Paragonimus miyazakii</i>											x						Ashford and Crewe, 2003, p. 51
<i>Paragonimus ohirai</i>											x						Ashford and Crewe, 2003, p. 51
<i>Paragonimus phillipinensis</i>	<i>Paragonimus westermanii</i>										x						Ashford and Crewe, 2003, p. 51
<i>Paragonimus sadoensis</i>	<i>Paragonimus ohirai</i>										x						Ashford and Crewe, 2003, p. 51
<i>Paragonimus siamensis</i>											x						Palmer et al., 1998, p. 736
<i>Paragonimus skrjabini</i>											x						Ashford and Crewe, 2003, p. 51
<i>Paragonimus uterobilateralis</i>											x						Ashford and Crewe, 2003, p. 51
<i>Paragonimus westermani</i>											x						Ashford and Crewe, 2003, p. 51
<i>Parascaris equorum</i>								x									Ashford and Crewe, 2003, p. 77
<i>Parastrongylus cantonensis</i>											x						Ashford and Crewe, 2003, p. 74
<i>Parastrongylus costaricensis</i>								x									Ashford and Crewe, 2003, p. 74
<i>Pearsonema plica</i>	Note: <i>Capillaria plica</i> according to http://www.biolib.cz/en/taxo/n/id87491 and																MCM-8, p. 1134
<i>Pelodera strongyloides</i>											x						Ashford and Crewe, 2003, p. 67
<i>Phaneroopsolus bonnei</i>											x						Ashford and Crewe, 2003, p. 48
<i>Philophthalmus lacrymosus</i>											x						Ashford and Crewe, 2003, p. 39
<i>Phocanema decipiens</i>								x									Ashford and Crewe, 2003, p. 76
<i>Physaloptera caucasica</i>								x									Ashford and Crewe, 2003, p. 79

Attachment A: Screening to the PCCL

Helminths	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Physaloptera transfuga</i>														x			Ashford and Crewe, 2003, p. 80
<i>Plagiorchis harinasutai</i>														x			Ashford and Crewe, 2003, p. 49
<i>Plagiorchis javensis</i>														x			Ashford and Crewe, 2003, p. 49
<i>Plagiorchis muris</i>														x			Ashford and Crewe, 2003, p. 49
<i>Plagiorchis philippinensis</i>														x			Ashford and Crewe, 2003, p. 49
<i>Poikilorchis congolensis</i>														x			Ashford and Crewe, 2003, p. 49
<i>Procerovum calderoni</i>														x			Ashford and Crewe, 2003, p. 44
<i>Prohemistomum vivax</i>														x			Ashford and Crewe, 2003, p. 29
<i>Prosthodendrium molenkampii</i>														x			Ashford and Crewe, 2003, p. 48
<i>Pseudamphistomum aethiopicum</i>														x			Ashford and Crewe, 2003, p. 47
<i>Pseudamphistomum truncatum</i>														x			Ashford and Crewe, 2003, p. 47
<i>Psilorchis hominis</i>	Note: Validity questionable, probably not a human pathogen.															x	Ashford and Crewe, 2003, p. 110
<i>Pygidiopsis summa</i>														x			Ashford and Crewe, 2003, p. 45
<i>Pyramicocephalus anthrocephalus</i>																x	Ashford and Crewe, 2003, p. 58
<i>Raillietina celebensis</i>														x			Ashford and Crewe, 2003, p. 60
<i>Raillietina demerariensis</i>														x			Ashford and Crewe, 2003, p. 60
<i>Rhabditis elongata</i>														x			Ashford and Crewe, 2003, p. 67
<i>Rhabditis inermis</i>														x			Ashford and Crewe, 2003, p. 67
<i>Rhabditis niellyi</i>	Note: Old and doubtful record, probably not a human pathogen.															x	Ashford and Crewe, 2003, p. 111
<i>Rhabditis pellio</i>	Note: Probably pseudoparasite, not a human pathogen.															x	Ashford and Crewe, 2003, p. 111
<i>Rictularia sp.</i>																x	Ashford and Crewe, 2003, p. 80
<i>Schistocephalus solidus</i>																x	Ashford and Crewe, 2003, p. 58
<i>Schistosoma bovis</i>																x	Ashford and Crewe, 2003, p. 32
<i>Schistosoma haematobium</i>																x	Ashford and Crewe, 2003, p. 32
<i>Schistosoma intercalatum</i>																x	Ashford and Crewe, 2003, p. 33
<i>Schistosoma japonicum</i>																x	Ashford and Crewe, 2003, p. 33
<i>Schistosoma malayensis</i>																x	Ashford and Crewe, 2003, p. 33
<i>Schistosoma mansoni</i>																x	Ashford and Crewe, 2003, p. 33
<i>Schistosoma mattheei</i>																x	Ashford and Crewe, 2003, p. 33
<i>Schistosoma mekongi</i>																x	Ashford and Crewe, 2003, p. 33
<i>Schistosoma rodhaini</i>																x	Ashford and Crewe, 2003, p. 34
<i>Schistosoma spindale</i>																x	Ashford and Crewe, 2003, p. 34
<i>Schistosomatium douthitti</i>																x	Ashford and Crewe, 2003, p. 34
<i>Setaria equina</i>																x	Ashford and Crewe, 2003, p. 86
<i>Spirocerca lupi</i>																x	Ashford and Crewe, 2003, p. 81
<i>Stellantchasmus falcatus</i>																x	Ashford and Crewe, 2003, p. 45
<i>Stictodora fuscata</i>																x	Ashford and Crewe, 2003, p. 45
<i>Strongyloides fuelleborni</i>																x	Ashford and Crewe, 2003, p. 67

Attachment A: Screening to the PCCL

Helminths	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Strongyloides papillosus</i>								x									Ashford and Crewe, 2003, p. 68
<i>Strongyloides ransomi</i>								x									Ashford and Crewe, 2003, p. 68
<i>Strongyloides stercoralis</i>								x									Ashford and Crewe, 2003, p. 68
<i>Strongyloides westeri</i>								x									Ashford and Crewe, 2003, p. 68
<i>Syphacea obvelata</i>											x						Ashford and Crewe, 2003, p. 75
<i>Taenia crassiceps</i>								x									Ashford and Crewe, 2003, p. 63
<i>Taenia saginata</i>								x									Ashford and Crewe, 2003, p. 64
<i>Taenia solium</i>								x									Ashford and Crewe, 2003, p. 64
<i>Taenia taeniaeformis</i>											x						Ashford and Crewe, 2003, p. 64
<i>Teladorsagia circumcincta</i>											x						Ashford and Crewe, 2003, p. 72
<i>Ternidens deminutus</i>											x						Ashford and Crewe, 2003, p. 70
<i>Thelazia californiensis</i>					x												Ashford and Crewe, 2003, p. 80
<i>Thelazia callipaeda</i>											x						Ashford and Crewe, 2003, p. 80
<i>Thelazia rhodesii</i>											x						MCM-8, p. 363
<i>Toxascaris leonina</i>	Note: Unknown as an human parasite.							x									Ashford and Crewe, 2003, p. 113
<i>Toxocara canis</i>								x									Ashford and Crewe, 2003, p. 77
<i>Toxocara cati</i>								x									Ashford and Crewe, 2003, p. 78
<i>Trichinella britovi</i>											x						Ashford and Crewe, 2003, p. 87
<i>Trichinella nativa</i>								x									Ashford and Crewe, 2003, p. 88
<i>Trichinella nelsoni</i>											x						Ashford and Crewe, 2003, p. 88
<i>Trichinella pseudospiralis</i>											x						Ashford and Crewe, 2003, p. 88
<i>Trichinella spiralis</i>								x									Ashford and Crewe, 2003, p. 88
<i>Trichinella T5</i>	<i>Trichinella murrelli</i>							x									Ashford and Crewe, 2003, p. 87
<i>Trichobilharzia brevis</i>											x						Ashford and Crewe, 2003, p. 34
<i>Trichobilharzia ocellata</i>								x									Ashford and Crewe, 2003, p. 34
<i>Trichobilharzia stagnicolae</i>								x									Ashford and Crewe, 2003, p. 34
<i>Trichostrongylus affinis</i>								x									Ashford and Crewe, 2003, p. 72
<i>Trichostrongylus axei</i>								x									Ashford and Crewe, 2003, p. 72
<i>Trichostrongylus brevis</i>											x						Ashford and Crewe, 2003, p. 72
<i>Trichostrongylus calcaratus</i>											x						Ashford and Crewe, 2003, p. 72
<i>Trichostrongylus capricola</i>											x						Ashford and Crewe, 2003, p. 72
<i>Trichostrongylus colubriformis</i>								x									Ashford and Crewe, 2003, p. 73
<i>Trichostrongylus instabilis</i>											x						Ashford and Crewe, 2003, p. 73
<i>Trichostrongylus lerouxii</i>											x						Ashford and Crewe, 2003, p. 73
<i>Trichostrongylus orientalis</i>											x						Ashford and Crewe, 2003, p. 73
<i>Trichostrongylus probolurus</i>											x						Ashford and Crewe, 2003, p. 73
<i>Trichostrongylus skrjabini</i>											x						Ashford and Crewe, 2003, p. 73
<i>Trichostrongylus vitrinus</i>											x						Ashford and Crewe, 2003, p. 74
<i>Trichuris suis</i>								x									Ashford and Crewe, 2003, p. 89
<i>Trichuris trichiura</i>								x									Ashford and Crewe, 2003, p. 89
<i>Trichuris vulpis</i>								x									Ashford and Crewe, 2003, p. 90
<i>Uncinaria stenocephala</i>	Note: Experimental infection only							x									Ashford and Crewe, 2003, p. 112
<i>Watsonius watsoni</i>											x						Ashford and Crewe, 2003, p. 40
<i>Wuchereria bancrofti</i>					x												Ashford and Crewe, 2003, p. 86

Attachment A: Screening to the PCCL

		Screening Criteria Used for Exclusion													
Helminths	Synonyms and Notes	1	2	3	4	5	6	7	8	9	10	11	12	PCCL	Reference
<i>Wuchereria lewisi</i>	<i>Wuchereria bancrofti</i>				x										Ashford and Crewe, 2003, p. 86
287 Helminths		0	0	0	25	0	0	106	0	0	156	0	0	PCCL = 0	

Attachment A: Screening to the PCCL

Fungi	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference	
		1	2	3	4	5	6	7	8	9	10	11	12			
<i>Absidia corymbifera</i>										x						MCM-9, p. 1839-1840, 1848
<i>Acremonium alabamense</i>										x						MCM-9, p. 1828
<i>Acremonium curvulum</i>										x						MCM-9, p. 1828
<i>Acremonium falciforme</i>										x						MCM-9, p. 1828
<i>Acremonium kiliense</i>										x						MCM-9, p. 1828
<i>Acremonium potronii</i>										x						MCM-9, p. 1828
<i>Acremonium recifei</i>										x						MCM-9, p. 1828
<i>Acremonium roseogriseum</i>										x						Howard, p. 384
<i>Acremonium strictum</i>										x						MCM-9, p. 1828
<i>Acrophialophora fuispora</i>										x						MCM-9, p. 1802, 1808
<i>Actinomadura madurae</i>	<i>Actinomadura</i> spp. are bacteria, not fungi									x						MCM-9, p. 516, 520
<i>Actinomadura pelletieri</i>										x						MCM-9, p. 516, 520
<i>Alternaria alternata</i>										x						MCM-9, p. 1898
<i>Alternaria chlamydospora</i>										x						MCM-9, p. 1898
<i>Alternaria dianthicola</i>										x						MCM-9, p. 1898
<i>Alternaria infectoria</i>										x						MCM-9, p. 1898
<i>Alternaria longipes</i>										x						MCM-9, p. 1898
<i>Alternaria stemphyloides</i>										x						http://www.doctorfungus.org/the_fungi/Alternaria.htm
<i>Alternaria tenuissima</i>										x						MCM-9, p. 1898
<i>Aphanoascus fulvescens</i>										x						MCM-9, p. 1802, 1808
<i>Apophysomyces elegans</i>										x						MCM-9, p. 1839-1840
<i>Arthrinium phaeospermum</i>										x						http://www.doctorfungus.org/the_fungi/Arthrinium.htm
<i>Arthrographis kelrae*</i>										x						Warris et al., 2001
<i>Aspergillus candidus</i>										x						MCM-9, p. 1807
<i>Aspergillus clavatus</i>										x						MCM-9, p. 1807
<i>Aspergillus fisherianus</i>										x						MCM-9, p. 1807
<i>Aspergillus flavipes</i>										x						MCM-9, p. 1807
<i>Aspergillus flavus group</i>										x						MCM-9, p. 1807
<i>Aspergillus fumigatus group</i>															<i>Aspergillus fumigatus</i>	
<i>Aspergillus glaucus</i>										x						MCM-9, p. 1807
<i>Aspergillus nidulans group</i>										x						MCM-9, p. 1807
<i>Aspergillus niger</i>										x						MCM-9, p. 1807
<i>Aspergillus oryzae</i>										x						MCM-9, p. 1807
<i>Aspergillus terreus group</i>										x						MCM-9, p. 1807
<i>Aspergillus versicolor</i>										x						MCM-9, p. 1807
<i>Aspergillus wentii</i>										x						MCM-9, p. 1807
<i>Aureobasidium pullulans</i>										x						MCM-9, p. 1898
<i>Basidiobolus ranarum</i>										x						MCM-9, p. 1839-1840
<i>Beauveria bassiana</i>										x						MCM-9, p. 1802, 1828
<i>Bipolaris australiensis</i>										x						MCM-9, p. 1898
<i>Bipolaris hawaiiensis</i>										x						MCM-9, p. 1898
<i>Bipolaris spicifera</i>										x						MCM-9, p. 1898

Attachment A: Screening to the PCCL

Fungi	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Blastomyces dermatitidis</i>										x							MCM-9, p. 1861
<i>Blastoschizomyces capitatus</i>										x							MCM-9, p. 1762, 1770-1771
<i>Botryomyces caespitosus</i>										x							Howard p. 575
<i>Botryosphaeria subglobosa</i>	<i>Neodeightonia subglobosa</i> , <i>Sphaeropsis subglobosa</i>										x						http://newportal.gbif.org/species/14373513 and http://www.cabri.org/CABRI/srs-bin/wgetz?-newld+-e+-page+qResult+[CABI_FIL-id:'IMI%20287616']
<i>Candida albicans</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida catenulata</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida famata</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida glabrata</i>						x											MCM-9, p. 1764, 1770-1771
<i>Candida guilliermondii</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida haemulonis</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida intermedia</i>											x						http://www.doctorfungus.org/the_fungi/Candida_spp.htm
<i>Candida kefyr</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida krusei</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida lambica</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida lipolytica</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida lusitanae</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida norvegensis</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida parapsilosis</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida rugosa</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida tropicalis</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida viswanathii</i>										x							MCM-9, p. 1764, 1770-1771
<i>Candida zeylanoides</i>										x							MCM-9, p. 1764, 1770-1771
<i>Cephalophora irregularis</i>											x						http://www.doctorfungus.org/imagaban/synonyms/Cephalophora.htm
<i>Cerinosterus cyanescens</i>											x						http://www.doctorfungus.org/the_fungi/Sporothrix.htm
<i>Chaetomium atrotunneum</i>											x						MCM-9, p. 1802, 1823-1824
<i>Chaetomium funicola</i>											x						http://www.doctorfungus.org/the_fungi/Chaetomium.htm
<i>Chaetomium globosum</i>											x						MCM-9, p. 1802, 1823-1824
<i>Chaetomium perpulchrum</i>											x						http://www.doctorfungus.org/the_fungi/Chaetomium.htm
<i>Chaetomium strumarium</i>											x						MCM-9, p. 1802, 1823-1824
<i>Chaetophoma dermo-unguis</i>												x					http://www.doctorfungus.org/imagaban/synonyms/Chaetophoma.htm
<i>Chlamydoabsidia padenii</i>												x					http://www.doctorfungus.org/imagaban/synonyms/Chlamydoabsidia.htm

Attachment A: Screening to the PCCL

Fungi	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Chlorella protothecoides</i>	Note: <i>Chlorella</i> spp. are algae, not fungi.									x							http://pcp.oxfordjournals.org/cgi/content/abstract/9/1/87
<i>Chrysosporium zonatum*</i>										x							Arvanitidou et al., 1999
<i>Chrysonilia sitophila</i>										x							http://www.doctorfungus.org/imageban/synonyms/Chrysonilia.htm
<i>Cladophialophora arxii</i>										x							MCM-9, p. 1898, 1900-1902
<i>Cladophialophora bantiana</i>										x							MCM-9, p. 1898, 1900-1902
<i>Cladophialophora boppii</i>										x							MCM-9, p. 1898, 1900-1902
<i>Cladophialophora carrionii</i>										x							MCM-9, p. 1898, 1900-1902
<i>Cladophialophora devriesii</i>										x							MCM-9, p. 1898, 1900-1902
<i>Cladorrhinum bulbillosum</i>										x							http://uwadmnweb.uwyo.edu/botany/Soil%20Microfungal%20Collection/RMF%20collection%20(Rocky%20Mountain%20Fungi)partII.htm
<i>Cladosporium cladosporioides</i>										x							MCM-9, p. 1898, 1904
<i>Cladosporium elatum</i>										x							http://www.doctorfungus.org/thefungi/Cladosporium.htm
<i>Cladosporium oxysporum</i>										x							http://www.doctorfungus.org/thefungi/Cladosporium.htm
<i>Cladosporium sphaerospermum</i>										x							MCM-9, p. 1898, 1904
<i>Coccidioides immitis</i>										x							MCM-9, p. 1861
<i>Cokeromyces recurvatus</i>										x							MCM-9, p. 1839-1840
<i>Colletotrichum coccodes</i>										x							Howard p. 662-664
<i>Colletotrichum dematium</i>										x							Howard p. 662-664
<i>Colletotrichum gloeosporioides</i>										x							Howard p. 662-664
<i>Conidiobolus coronatus</i>										x							MCM-9, p. 1839-1840
<i>Conidiobolus incongruus</i>										x							MCM-9, p. 1839-1840
<i>Conidiobolus lamprauges</i>										x							Howard p. 133-137
<i>Coniothyrium fuckelii</i>										x							http://www.doctorfungus.org/imageban/synonyms/Coniothyrium.htm
<i>Coprinus cinereus</i>										x							MCM-9, p. 1802, 1826
<i>Cryptococcus neoformans</i>										x							MCM-9, p. 1765-1767, 1770-1771
<i>Cunninghamella bertholletiae</i>										x							MCM-9, p. 1839-1840, 1849
<i>Curvularia brachyspora</i>										x							Howard p. 584-586
<i>Curvularia clavata</i>										x							Howard p. 584-586
<i>Curvularia geniculata</i>										x							MCM-9, p. 1918
<i>Curvularia lunata</i>										x							MCM-9, p. 1918
<i>Curvularia pallescens</i>										x							Howard p. 584-586
<i>Curvularia senegalensis</i>										x							Howard p. 584-586
<i>Curvularia veruculosa</i>										x							Howard p. 584-586
<i>Cylindrocarpon cyanescens</i>										x							MCM-9, p. 1802, 1808, 1818
<i>Cylindrocarpon lichenicola</i>										x							MCM-9, p. 1802, 1808, 1818

Attachment A: Screening to the PCCL

Fungi	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Cylindrocarpon vaginiae</i>										x							Howard p. 394
<i>Dichotomophthora portulacae</i>										x							http://www.doctorfungus.org/im-ageban/synonyms/Dichotomophthora.htm
<i>Dichotomophthoropsis nympphaerum</i>										x							http://www.doctorfungus.org/im-ageban/synonyms/Dichotomophthoropsis.htm
<i>Dissitimurus exedrus</i>										x							Howard p. 588
<i>Doratomyces stemonitis</i>										x							http://www.doctorfungus.org/im-ageban/synonyms/Doratomyces.htm
<i>Drechslera biseptata</i>										x							Howard p. 588-589
<i>Emmonsia crescens</i>										x							MCM-9, p. 1860
<i>Emmonsia parva</i>										x							MCM-9, p. 1860
<i>Engyodontium album</i>										x							MCM-9, p. 1802, 1828
<i>Epidermophyton floccosum</i>										x							MCM-9, p. 1881
<i>Exophiala dermatitidis</i>										x							MCM-9, p. 1898
<i>Exophiala jeanselmei</i>																<i>Exophiala jeanselmei</i>	
<i>Exophiala moniliae</i>										x							Howard p. 590-596
<i>Exophiala pisciphila</i>										x							Howard p. 590-596
<i>Exophiala psychrophila</i>										x							http://www.doctorfungus.org/the-fungi/exophiala.htm
<i>Exophiala salmonis</i>										x							Howard p. 590-596
<i>Exophiala spinifera</i>										x							MCM-9, p. 1898, 1902
<i>Exserohilum longirostratum</i>										x							MCM-9, p. 1898, 1902
<i>Exserohilum macginnisii</i>										x							Howard p. 596-597
<i>Fusarium aquaeductuum</i>										x							Howard p. 402
<i>Fusarium chlamydosporum</i>										x							MCM-9, p. 1818
<i>Fusarium dimerum</i>										x							MCM-9, p. 1818
<i>Fusarium incarnatum</i>										x							Howard p. 407-409
<i>Fusarium moniliforme</i>										x							MCM-9, p. 1818
<i>Fusarium napiforme</i>										x							MCM-9, p. 1818
<i>Fusarium nivale</i>										x							Howard p. 431
<i>Fusarium oxysporum</i>										x							MCM-9, p. 1818
<i>Fusarium pallidoroseum</i>										x							Howard p. 320, 418-421
<i>Fusarium proliferatum</i>										x							MCM-9, p. 1818
<i>Fusarium sacchari</i>										x							MCM-9, p. 1818
<i>Fusarium solani</i>																<i>Fusarium solani</i>	
<i>Fusarium subglutinans</i>										x							MCM-9, p. 1818
<i>Fusarium ventricosum</i>										x							http://www.doctorfungus.org/the-fungi/fusarium.htm
<i>Fusarium verticillioides</i>										x							MCM-9, p. 1818
<i>Geotrichum candidum*</i>										x							Rosenzweig et al., 1986
<i>Hansenula anomala</i>										x							MCM-9, p. 1768, 1770-1771

Attachment A: Screening to the PCCL

Fungi	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Histoplasma capsulatum</i>											x						MCM-9, p. 1860
<i>Hortaea werneckii</i>											x						MCM-9, p. 1898, 1904
<i>Lasiodiplodia theobromae</i>											x						MCM-9, p. 1898, 1904
<i>Lecythophora hoffmannii</i>											x						MCM-9, p. 1802, 1828
<i>Lecythophora mutabilis</i>											x						MCM-9, p. 1802, 1828
<i>Leptosphaeria senegalensis</i>											x						MCM-9, p. 1922
<i>Leptosphaeria tompkinsii</i>											x						MCM-9, p. 1922
<i>Loboa loboii</i>											x						http://www.doctorfungus.org/the_fungi/Lacazia.htm
<i>Madurella grisea</i>											x						MCM-9, p. 1922
<i>Madurella mycetomatis</i>											x						MCM-9, p. 1922
<i>Malassezia furfur</i>								x									MCM-9, p. 1767-1768, 1770-1771
<i>Malassezia globosa</i>								x									MCM-9, p. 1767-1768, 1770-1771
<i>Malassezia obtusa</i>								x									MCM-9, p. 1767-1768, 1770-1771
<i>Malassezia pachydermatis</i>								x									MCM-9, p. 1767-1768, 1770-1771
<i>Malassezia restricta</i>								x									MCM-9, p. 1767-1768, 1770-1771
<i>Malassezia slooffiae</i>								x									MCM-9, p. 1767-1768, 1770-1771
<i>Malassezia sympodialis</i>								x									MCM-9, p. 1767-1768, 1770-1771
<i>Microascus cinereus</i>											x						MCM-9, p. 1802, 1823-1824, 1904
<i>Microascus cirrosus</i>											x						MCM-9, p. 1802, 1823-1824, 1904
<i>Microsporium audouinii</i>											x						MCM-9, p. 1881
<i>Microsporium canis</i>											x						MCM-9, p. 1881
<i>Microsporium equinum</i>											x						MCM-9, p. 1881; Howard p. 170
<i>Microsporium ferrugineum</i>											x						MCM-9, p. 1881
<i>Microsporium fulvum</i>											x						MCM-9, p. 1881; Howard p. 156, 181
<i>Microsporium gallinae</i>											x						MCM-9, p. 1881
<i>Microsporium gypseum</i>											x						MCM-9, p. 1881
<i>Microsporium nanum</i>											x						MCM-9, p. 1881
<i>Microsporium persicolor</i>											x						MCM-9, p. 1881
<i>Microsporium praecox</i>											x						MCM-9, p. 1881
<i>Microsporium racemosum</i>											x						MCM-9, p. 1881
<i>Microsporium vanbreuseghemii</i>											x						MCM-9, p. 1881
<i>Moniliella suavelolens</i>											x						http://www.doctorfungus.org/imagaban/synonyms/Moniliella.htm

Attachment A: Screening to the PCCL

Fungi	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference	
		1	2	3	4	5	6	7	8	9	10	11	12			
<i>Mucor circinelloides</i>										x						MCM-9, p. 1839-1840, 1851
<i>Mucor hiemalis</i>										x						MCM-9, p. 1839-1840, 1851
<i>Mucor indicus</i>										x						Howard p. 70, 98-99, 101
<i>Mucor racemosus</i>										x						MCM-9, p. 1839-1840, 1851
<i>Mucor ramosissimus</i>										x						MCM-9, p. 1839-1840, 1851
<i>Myceliophthora thermophila</i>										x						MCM-9, p. 1802, 1828
<i>Mycocentrospora acerina</i>										x						Howard p. 602-603
<i>Mycocleptodiscus indicus</i>										x						Howard p. 602-603
<i>Myriodontium keratinophilum</i>										x						MCM-9, p. 1802, 1828
<i>Nannizzia cajetani</i>										x						Howard p. 155
<i>Nattrassia mangiferae</i>										x						MCM-9, p. 1898, 1904
<i>Neocosmospora vasinfecta</i>										x						Howard p. 434-436
<i>Neotestudina rosatii</i>										x						MCM-9, p. 1918-1921
<i>Nigrospora sphaerica</i>										x						http://www.doctorfungus.org/the_fungi/Nigrospora.htm
<i>Ochroconis gallopava</i>										x						MCM-9, p. 1898, 1902
<i>Oidiodendron cerealis</i>										x						http://www.doctorfungus.org/imageban/synonyms/Oidiodendron.htm
<i>Onychocola canadensis</i>										x						MCM-9, p. 1802, 1828
<i>Ovadendron ochraceum</i>										x						http://www.catalogueoflife.org/show_species_details.php?record_id=3330913
<i>Ovadendron sulphureo-ochraceum</i>										x						Howard p. 230-232
<i>Paecilomyces farinosus</i>										x						http://www.doctorfungus.org/the_fungi/Paecilomyces.htm
<i>Paecilomyces fumerosoreus</i>										x						Howard p. 361-362
<i>Paecilomyces javanicus</i>										x						MCM-9, p. 1802, 1829
<i>Paecilomyces lilacinus</i>										x						MCM-9, p. 1802, 1829
<i>Paecilomyces marquandii</i>										x						MCM-9, p. 1802, 1829
<i>Paecilomyces variotii</i>										x						MCM-9, p. 1802, 1829
<i>Paecilomyces viridis</i>										x						Howard p. 357-359
<i>Paracoccidioides brasiliensis</i>										x						MCM-9, p. 1861
<i>Penicillium chrysogenum</i>										x						MCM-9, p. 1802, 1829
<i>Penicillium citrinum</i>										x						MCM-9, p. 1802, 1829
<i>Penicillium commune</i>										x						MCM-9, p. 1802, 1829
<i>Penicillium decumbens</i>										x						MCM-9, p. 1802, 1829
<i>Penicillium dupontii</i>										x						Howard p. 340-346
<i>Penicillium expansum</i>										x						MCM-9, p. 1802, 1829
<i>Penicillium marneffeii</i>										x						MCM-9, p. 1802, 1822
<i>Penicillium purpurogenum</i>										x						MCM-9, p. 1802, 1829
<i>Phaeoanellomyces elegans</i>										x						Howard p. 605-606
<i>Phaeoanellomyces werneckii</i>										x						MCM-9, p. 1898, 1904

Attachment A: Screening to the PCCL

Fungi	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference		
		1	2	3	4	5	6	7	8	9	10	11	12				
<i>Phaeosclera dematioides</i>										x							http://www.doctorfungus.org/im-ageban/synonyms/Phaeosclera.htm
<i>Phaeotrichoconis crotalariae</i>										x							Howard p. 606-607
<i>Phialemonium curvatum</i>										x							MCM-9, p. 1898, 1900
<i>Phialemonium obovatum</i>										x							MCM-9, p. 1898, 1900
<i>Phialophora bubakii</i>										x							Howard p. 607-612
<i>Phialophora pedrosoi</i>										x							http://www.doctorfungus.org/the-fungi/Fonsecaea.htm
<i>Phialophora repens</i>										x							MCM-9, p. 1898, 1902-1903
<i>Phialophora richardsiae</i>										x							MCM-9, p. 1898, 1902-1903
<i>Phialophora verrucosa</i>										x							MCM-9, p. 1898, 1902-1903
<i>Phoma cava</i>										x							http://www.doctorfungus.org/the-fungi/phoma.htm
<i>Phoma cruris-hominis</i>										x							Howard p. 666-668
<i>Phoma eupyrena</i>										x							Howard p. 666-668
<i>Phoma glomerata</i>										x							Howard p. 666-668
<i>Phoma herbarum</i>										x							http://www.doctorfungus.org/the-fungi/phoma.htm
<i>Phoma hibernica</i>										x							Howard p. 666-668
<i>Phoma minutella</i>										x							Howard p. 666-668
<i>Phoma oculo-hominis</i>										x							Howard p. 666-668
<i>Phyllosticta citricarpa</i>										x							http://www.doctorfungus.org/the-fungi/phoma.htm
<i>Piedraia hortae</i>										x							MCM-9, p. 1891
<i>Pleurophoma pleurospora</i>										x							Howard p. 666-668
<i>Pneumocystis carinii</i>											x						MCM-9, p. 1789-1791
<i>Prototheca wickerhamii</i>											x						MCM-9, p. 1770-1771, 1779
<i>Prototheca zopfii</i>											x						MCM-9, p. 1770-1771, 1779
<i>Pseudoallescheria boydii</i>	<i>Petrieldidium boydii</i>										x						MCM-9, p. 1922
<i>Pseudomicrodochium suttonii</i>											x						MCM-9, p. 1898, 1902
<i>Pyrenochaeta mackinnonii</i>											x						MCM-9, p. 1918, 1921-1922
<i>Pyrenochaeta romeroi</i>											x						MCM-9, p. 1918, 1921-1922
<i>Pyrenochaeta unguis-hominis</i>											x						Howard p. 666-668
<i>Pythium insidiosum</i>											x						MCM-9, p. 1936-1939
<i>Rhinocladiella aquaspersa</i>											x						MCM-9, p. 1898, 1904
<i>Rhinocladiella compacta</i>											x						http://www.doctorfungus.org/the-fungi/Fonsecaea.htm
<i>Rhinocladiella obovoidea</i>											x						http://www.doctorfungus.org/im-ageban/synonyms/Ramichloridium.htm
<i>Rhinocladiella schulzeri</i>											x						http://www.doctorfungus.org/im-ageban/synonyms/Ramichloridium.htm
<i>Rhinosporidium seeberi</i>											x						MCM-9, p. 1936-1937, 1942-1943

Attachment A: Screening to the PCCL

Fungi	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference			
		1	2	3	4	5	6	7	8	9	10	11	12					
<i>Rhizomucor miehei</i>														x				MCM-9, p. 1839-1840
<i>Rhizomucor pusillus</i>														x				MCM-9, p. 1839-1840
<i>Rhizopus azygosporus</i>														x				MCM-9, p. 1839-1840,
<i>Rhizopus microsporus</i>														x				MCM-9, p. 1839-1840,
<i>Rhizopus oryzae</i>														x				MCM-9, p. 1839-1840, 1847
<i>Rhizopus stolonifer</i>														x				MCM-9, p. 1839-1840,
<i>Rhodotorula glutinis</i>														x				MCM-9, p. 1768, 1770-1771
<i>Rhodotorula minuta</i>														x				MCM-9, p. 1768, 1770-1771
<i>Rhodotorula mucilaginosa</i>														x				MCM-9, p. 1768, 1770-1771
<i>Rhodotorula rubra</i>														x				MCM-9, p. 1768, 1770-1771
<i>Saccharomyces cerevisiae</i>														x				MCM-9, p. 1768, 1770-1771
<i>Saksenaea vasiformis</i>														x				MCM-9, p. 1839-40, 1850
<i>Sarcinomyces phaeomuriformis</i>														x				MCM-9, p. 1898-1902
<i>Scedosporium prolificans</i>														x				MCM-9, p. 1821
<i>Schizophyllum commune</i>														x				MCM-9, p. 1802, 1826
<i>Scolecobasidium humicola</i>														x				Howard p. 617
<i>Scolecobasidium tshawytschae</i>														x				Howard p. 617
<i>Scopulariopsis acremonium</i>														x				MCM-9, p. 1823
<i>Scopulariopsis asperula</i>														x				MCM-9, p. 1823
<i>Scopulariopsis brevicaulis</i>														x				MCM-9, p. 1823
<i>Scopulariopsis brumptii</i>														x				MCM-9, p. 1823
<i>Scopulariopsis candida</i>														x				MCM-9, p. 1823
<i>Scopulariopsis flava</i>														x				MCM-9, p. 1823
<i>Scopulariopsis fusca</i>														x				MCM-9, p. 1823
<i>Scytalidium hyalinum</i>	<i>Natrassia mangiferae</i>													x				MCM-9, p. 1904
<i>Scytalidium infestans</i>														x				http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0036-46651999000500009&lng=pt&nr=iso&tlng=pt
<i>Setosphaeria rostrata</i>	<i>Exserohilum rostratum</i>													x				MCM-9, p. 1900; Palmer, p. 565, 597
<i>Sporothrix schenckii</i>														x				MCM-9, p. 1898, 1906
<i>Sporotrichum pruinosum*</i>														x				Doggett, 2000
<i>Stachybotrys chartarum*</i>														x				Doggett, 2000
<i>Stemphylium macrosporoideum*</i>														x				West 1986
<i>Stenella araguata</i>														x				http://www.doctorfungus.org/imageban/synonyms/Stenella.htm
<i>Streptomyces somaliensis</i>	Note: <i>Streptomyces</i> spp. are bacteria, not fungi													x				MCM-9, p. 519-520
<i>Taeniolella exilis</i>														x				Howard p. 621
<i>Taeniolella stilbasporea</i>														x				Howard p. 621
<i>Tetraploa aristata</i>														x				Howard p. 621-623
<i>Thermomyces lanuginosus</i>														x				Howard p. 623

Attachment A: Screening to the PCCL

Fungi	Synonyms and Notes	Screening Criteria Used for Exclusion												PCCL	Reference					
		1	2	3	4	5	6	7	8	9	10	11	12							
<i>Torulopsis magnoliae</i>																				http://www.doctorfungus.org/im-ageban/synonyms/Torulopsis.htm
<i>Trichoderma pseudokoningii</i>																				MCM-9, p. 1802, 1828-1829
<i>Trichoderma viride</i>																				MCM-9, p. 1802, 1828-1829
<i>Trichomaris invadens</i>																				http://www.pac.dfo-mpo.gc.ca/sci/shelldis/pages/chitfdb_e.htm
<i>Trichophyton ajelloi</i>																				MCM-9, p. 1881
<i>Trichophyton concentricum</i>																				MCM-9, p. 1881
<i>Trichophyton equinum</i>																				MCM-9, p. 1881
<i>Trichophyton gallinae</i>																				MCM-9, p. 1881
<i>Trichophyton gourvilii</i>																				MCM-9, p. 1881; Howard p. 173
<i>Trichophyton megninii</i>																				MCM-9, p. 1881
<i>Trichophyton mentagrophytes</i>																				MCM-9, p. 1881
<i>Trichophyton rubrum</i>																				MCM-9, p. 1881
<i>Trichophyton schoenleinii</i>																				MCM-9, p. 1881
<i>Trichophyton simii</i>																				MCM-9, p. 1881
<i>Trichophyton soudanense</i>																				MCM-9, p. 1881
<i>Trichophyton tonsurans</i>																				MCM-9, p. 1881
<i>Trichophyton verrucosum</i>																				MCM-9, p. 1881
<i>Trichophyton violaceum</i>																				MCM-9, p. 1881
<i>Trichosporon asahii</i>																				MCM-9, p. 1769-1771
<i>Trichosporon beigeli</i>																				MCM-9, p. 1769-1771
<i>Trichosporon cutaneum</i>																				MCM-9, p. 1769-1771
<i>Trichosporon inkin</i>																				MCM-9, p. 1769-1771
<i>Trichosporon mucoides</i>																				MCM-9, p. 1769-1771
<i>Trichosporon ovoides</i>																				MCM-9, p. 1769-1771
<i>Tritirachium oryzae</i>																				http://www.doctorfungus.org/im-ageban/synonyms/Tritirachium.htm
<i>Tubercularia vulgaris</i>																				Howard p. 448-449
<i>Ulocladium chartarum</i>																				Howard p. 623-624
<i>Veronaea botryosa</i>																				http://www.doctorfungus.org/im-ageban/synonyms/Veronaea.htm
<i>Verticillium nigrescens</i>																				Howard p. 449-450
<i>Volutella cinerescens</i>																				Howard p. 451
313 Fungi		0	0	0	0	12	1	0	0	297	0	0	0	0	0	0	0	0	PCCL = 3	

*Fungi identified by an asterisk were added to the microbial CCL universe by EPA because they were found in biofilm of drinking water distribution systems in the U.S.
MCM-9 refers to the Manual of Clinical Microbiology, 9th Edition

Attachment A: Screening to the PCCL**Summary**

Pathogen	Total No.	Screening Criteria Used for Exclusion												PCCL No.
		1	2	3	4	5	6	7	8	9	10	11	12	
Bacteria	540	125	14	10	37	117	7	0	29	154	2	28	5	12
Viruses	219	0	0	26	104	0	19	1	18	0	36	8	0	7
Protozoa ¹	66	0	0	1	29	3	0	4	7	7	0	6	0	7
Helminths	287	0	0	0	25	0	0	106	0	0	156	0	0	0
Fungi	313	0	0	0	0	12	1	0	0	297	0	0	0	3
Total	1,425	125	14	37	195	132	27	111	54	458	194	42	5	29

¹*Cryptosporidium* and *Giardia* are considered to be regulated by LT2. They were not subjected to the screening process, though they were used as examples of contaminants that need to be regulated to validate screening criteria and scoring protocols. These organisms will not be listed on CCL3.