**Resources on Contained Use of LMOs and Pathogens (human, animal and plant)**

Biosafety principles and practices are similar irrespective of whether the organisms are genetically modified pathogenic for human, animal or plant. The Annex to the World Health Organization Laboratory Safety Manual 3rd edition (reference below) states: “The backbone of the practice of biosafety is risk assessment. While there are many tools available to assist in the assessment of risk for a given procedure or experiment, the most important component is professional judgement. Risk assessment should be performed by the individuals most familiar with the specific characteristics of the organisms being considered for use, the equipment and the procedures to be employed, animal models that may be used, and the containment equipment and facilities available.”

The following are indicative examples of international, regional and national resources used in the implementation of contained use practices:

* World Health Organization – Laboratory Safety Manual 3rd edition (first published in 1983, but revised periodically to take scientific developments into account) (<http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_CSR_LYO_2004_11/en/> )
* World Health Organization – Biorisk management – Laboratory biosecurity guidance (<http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_EPR_2006_6.pdf> )
* Biological agents: Managing the Risks in Laboratories and Healthcare Premises (UK) (<http://www.hse.gov.uk/biosafety/biologagents.pdf> )
* The Genetically Modified Organisms (Contained Use) Regulations 2014. Guidance on regulations. HSE (UK) (<http://www.hse.gov.uk/pubns/priced/l29.pdf> )
* Biosafety in Microbiological and Biomedical Laboratories (USA) (<http://www.cdc.gov/biosafety/publications/bmbl5/>
* NIH Guidelines for research involving recombinant or synthetic nucleic acid molecules (<http://osp.od.nih.gov/sites/default/files/NIH_Guidelines.html> )
* A practical guide to containment – Plant biosafety in research greenhouses (USA) (<http://www.isb.vt.edu/Containment-guide.aspx> )
* Canadian Biosafety Standard for Facilities Handling or Storing Human and Terrestrial Animal Pathogens and Toxins (<http://canadianbiosafetystandards.collaboration.gc.ca/cbs-ncb/assets/pdf/cbsg-nldcb-eng.pdf> )
* Containment Standards for Facilities Handling Plant Pathogens. Canadian Food Inspection Agency Canada (<http://www.inspection.gc.ca/plants/plant-pests-invasive-species/biocontainment/containment-standards/eng/1412353866032/1412354048442?chap=0>
* OIE Standard for Managing Biorisk in the Veterinary Laboratory and Animal Facility (<http://www.oie.int/fileadmin/Home/fr/Health_standards/tahm/3.5_BIOL_AGENT_SPECIF_RA.pdf> )
* Office of Gene Technology Regulator (OGTR) – list of guidelines (Australia) (<http://www.ogtr.gov.au/internet/ogtr/publishing.nsf/content/guidelines-1> )
* Manuel du HCB sur l’utilisation confinée d’organismes génétiquement modifiés (France) (<http://www.hautconseildesbiotechnologies.fr/fr/system/files/file_fields/2015/06/30/manuelduconfine.pdf> )
* Directive 2009/41/EC on the contained use of genetically modified microorganisms (EU) (<http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=URISERV:sa0015&from=EN> )
* Laboratory Biosafety Guidebook (Pakistan) (<http://www.internationalbiosafety.org/images/IFBA_docs/Pakistan%20Biosafety%20Guidebook.pdf>
* Laboratory Biosafety and Biosecurity Policy Guidelines (Kenya) (<http://www.internationalbiosafety.org/images/IFBA_docs/Kenya%20Biosafety%20Guidelines.pdf>
* Laboratory biorisk management. CWA 15793:2011 (International) (<http://www.uab.cat/doc/CWA15793_2011> )
* Laboratory biorisk management – Guidelines for the implementation of CWA 15793:2008. (International (ftp://ftp.cen.eu/CEN/Sectors/List/ICT/Workshops/CWA%2016393.pdf
* Biosafety professionals as stakeholders in the BTWC: Biosafety, biosecurity and the BTWC ([http://www.internationalbiosafety.org/images/IFBA\_docs/Biosafety%20&%20BTWC.pdf](http://www.internationalbiosafety.org/images/IFBA_docs/Biosafety%20%26%20BTWC.pdf)