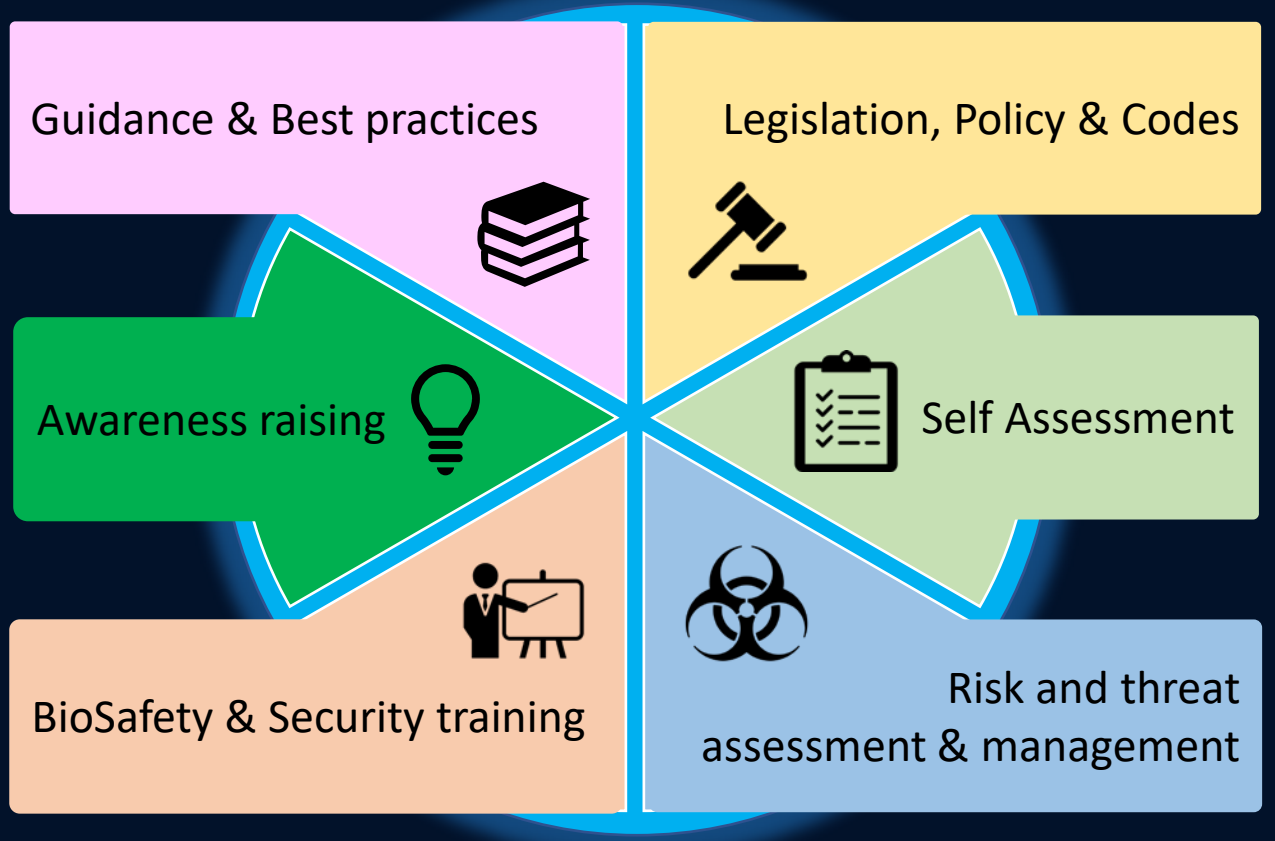
Biosecurity Resource Toolbox

The Biosecurity resource toolbox is categorized into six themes that can be accessed by clicking on the text or icon, shown in the pie chart.

By clicking on each of the themes, a new window will open with the available biosecurity resources within that theme.

Each resource is described using a small introduction, and a link to the location where the resource can be found. This location can be a website, application, or a direct link to a specific document. For more information, send an email



National Institute for Public Health and the Environment
Ministry of Health, Welfare and Sport

enco

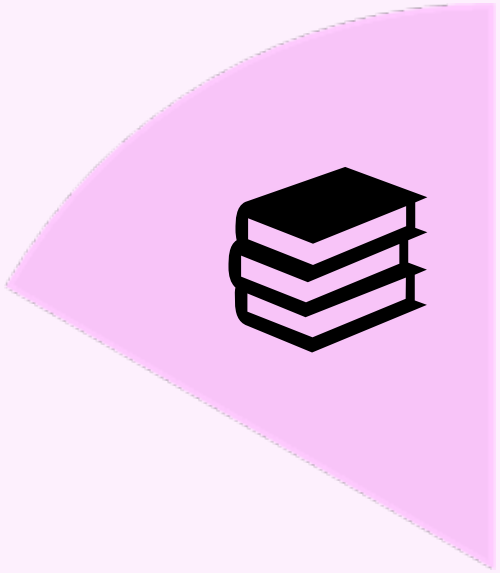
ENEA
Italian National Agency for New Technologies, Energy and Sustainable Economic Development

Guidance & Best practices

This category contains many resources describing Guidance and Best practices regarding Biosecurity.

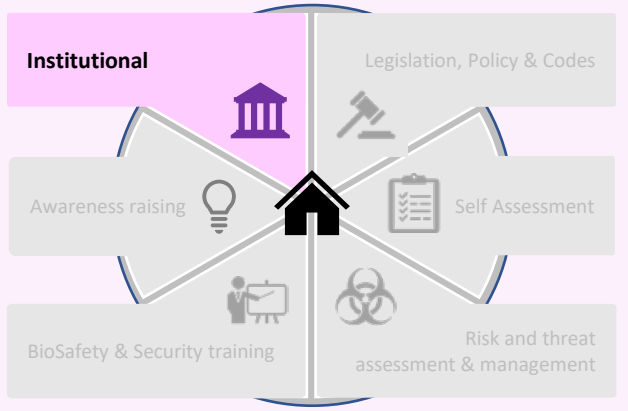
Therefore, this category is separated into a part covering Guidance & Best practices on an institutional level, and a part that has an emphasize on the national level.

You can click on the icons representing institutional or national level to navigate to the corresponding resources



Institutional level **National level**

Back to Guidance & Best practices



Institutional level

The resources in this category will guide you to tools and documents that can help to setup Guidance documents and Best practices regarding biosecurity at an institutional level.
The resources available in this category are primarily intended for researchers and biosafety officers. However, other interested parties will find interesting information here as well.

Page 1/2

Guidelines for researchers on dual use and misuse of research

Guideline for Institutions and funding bodies who have the aim to raise researchers' awareness of the issues relating to dual use and misuse of research and help them to handle this appropriately.

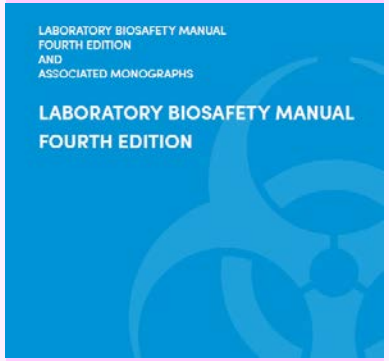
To resource, click here

Proposed Framework for Oversight of Dual Use Research

This dual use framework describes strategies for Minimizing the Potential Misuse of Research Information.

To resource, click here

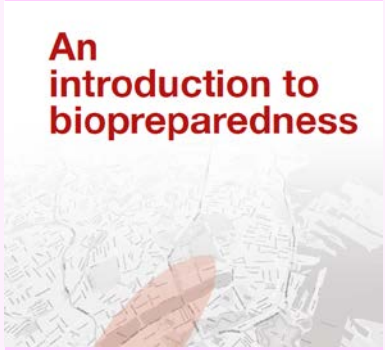
Laboratory biosecurity guidance



This latest document provides more detailed guidance on biosecurity within a biological laboratory and addresses its basic principles and best practices.

To resource, click here

An introduction to biopreparedness



This book from CBB describes an effective way to investigate and respond to incidents involving hazardous biological substances, and offers some strategies for dealing with the aftermath.

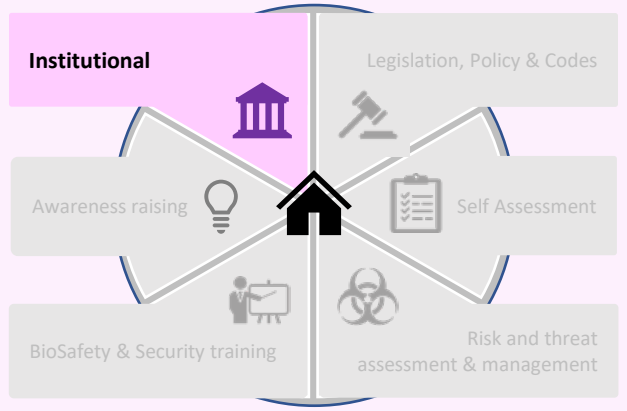
To resource, click here

Biosecurity Challenges of the Global Expansion of High-Containment laboratories

An international workshop examined biosafety and biosecurity issues related to the design, construction, maintenance, and operation of high-containment biological laboratories.

To resource, click here

Back to Guidance & Best practices



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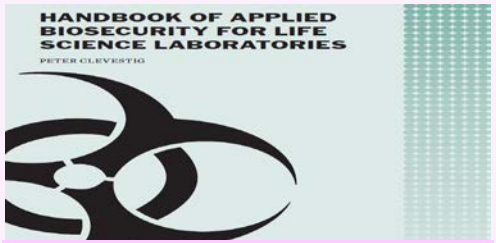
Page 2/2

Handbook of Applied Biosecurity for Life Science Laboratories



It presents the basic components of applied biosecurity that are relevant to all laboratory employees.

To resource, click here

OECD Best practice guidlines for biological resource centres

This report presents the outcome of discussions held by the OECD member and partner countries and presents the best practices of biological resource centres

To resource, click here

Biological agents: Managing the risks in laboratories and healthcare premises

Guidlines on working in a laboratory with biological agents, containing information on legislation and requirements.

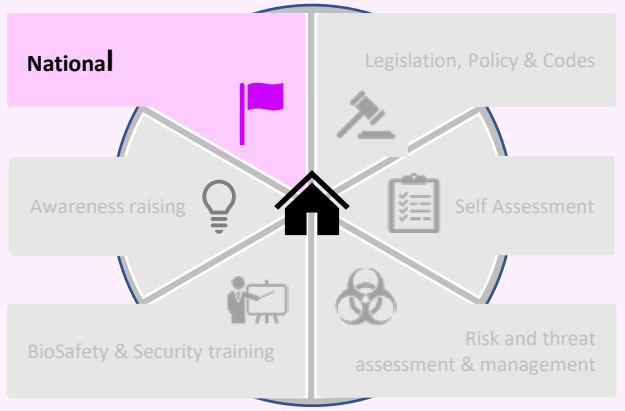
To resource, click here

Clinical Laboratory preparedness and response guide

This guide was developed to assist laboratories by providing guidance on the responsibilities and practices that are recommended when dealing with biothreat agents.

To resource, click here

Back to Guidance & Best practices

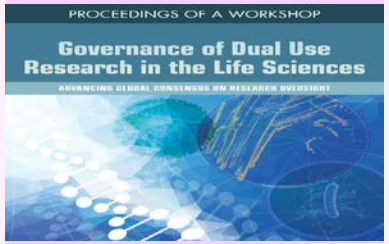


National level

The resources in this category will guide you to tools and documents that can help to setup Guidance documents and Best practices regarding biosecurity at a National level. The resources available presented here are primarily intended for policy makers and biosafety officers. However, other interested parties will find interesting information here as well.

Page 1/2

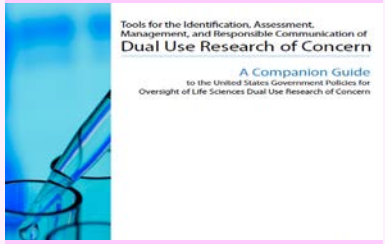
Governance of Dual Use Research in the Life Sciences



Summary of International workshop: The Governance of Dual Use Research in the Life Sciences.

To resource, click here

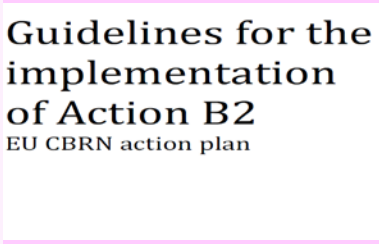
Dual Use Research of Concern: A companion guide



Tools for the Identification, Assessment, Management, and Responsible Communication of Dual Use Research of Concern.

To resource, click here

Guidelines for implementation of Action B2 EU CBRN Action Plan



This document is a guide which was prepared in order to assist Member States to implement the B2 action and bring them into compliance with UNSCR1540 and BWTC

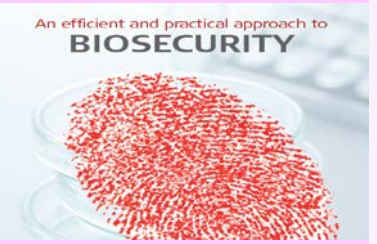
To resource, click here

Responsible life sciences research for global health security

The purpose of this guidance is to inform Member States about the risks posed by accidents or the potential deliberate misuse of life sciences research.

To resource, click here

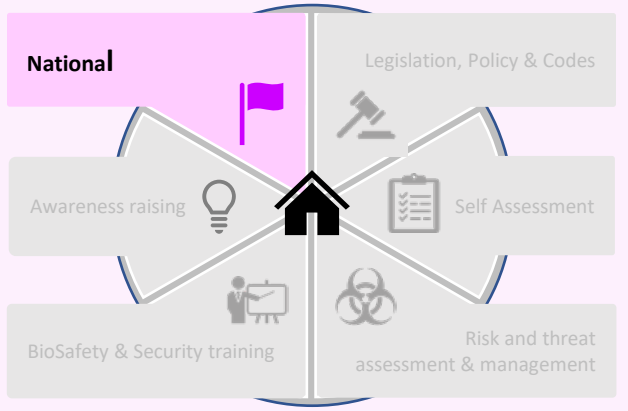
An efficient and practical approach to biosecurity



Book on the experiences of research and hard work on the preperation and implementation of the Biosecurity Law in Denmark to help other nations develop biosecurity laws

To resource, click here

Back to Guidance & Best practices



National level

The resources in this category will guide you to tools and documents that can help to setup Guidance documents and Best practices regarding biosecurity at a National level. The resources available presented here are primarily intended for policy makers and biosafety officers. However, other interested parties will find interesting information here as well.

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UK Biological Security Strategy

Outline of UK Biosecurity Strategy: building resilience to health threats

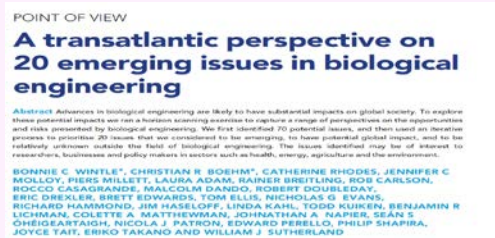
To resource, click here

Recommendations for improving biosecurity measures

Recommendations for improving biosecurity measures for Spain, based on the BTWC and UNSCR1540

To resource, click here

Point of View: A transatlantic perspective on 20 emerging issues in biological engineering

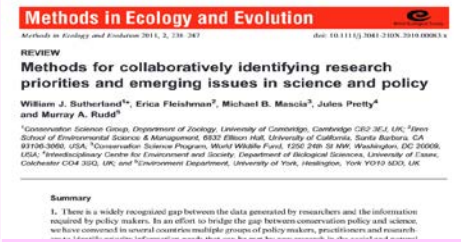

POINT OF VIEW

A transatlantic perspective on 20 emerging issues in biological engineering

To explore these potential impacts, we ran a horizon scanning exercise to capture a range of perspectives on the opportunities and risks presented by biological engineering.

To resource, click here

Methods for collaboratively identifying research priorities and emerging issues in science and policy


Methods in Ecology and Evolution

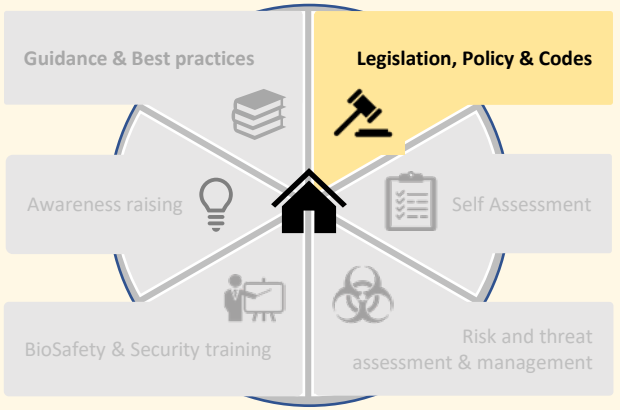
REVIEW

Methods for collaboratively identifying research priorities and emerging issues in science and policy

Outline of a horizon scan and the method explained

To resource, click here

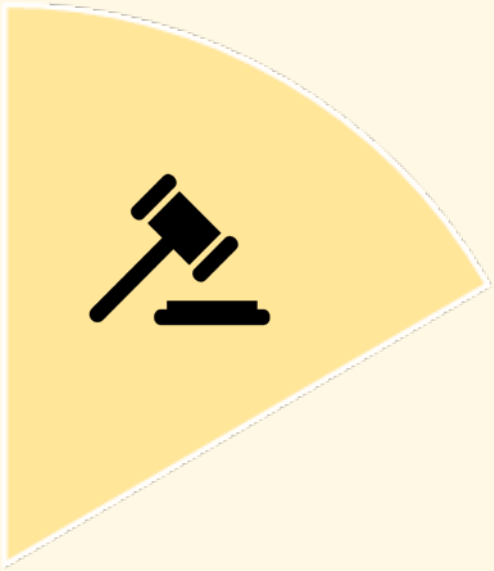
Legislation, Policy & Codes



This category contains many resources regarding legislation, policies and codes (of conduct).

Therefore, this category is separated into a part covering Legislation, and a part that has an emphasize on policies and codes of conduct regarding Biosecurity.

You can click on the icons representing Legislation, or Policy & codes to navigate to the responding resources



Legislation

Policy & Codes

Back to Legislation, Policy & codes

Legislation

The resources in this category will guide you to tools that can help to draw up legislation regarding biosecurity. The resources available in this category are primarily intended for legislators, policy makers, management, and biosafety officers. However, other interested parties will find interesting information here as well.

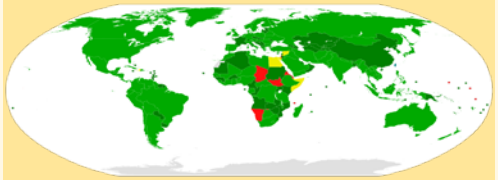
Page 1/2

Council Regulation (EC) No 2021/821 on the Community regime for the exports control of dual-use items

European Community regime for the control of exports, transfer, brokering and transit of dual-use items.

For Resource, click here

Biological and Toxin Weapons Convention (BWTC)



The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction

For Resource, click here

UN Security Council Resolution 1540

Non-proliferation of weapons of mass destruction

For Resource, click here

EU Regulation No.2009/43/EC regarding transfers of defence-related products within the Community

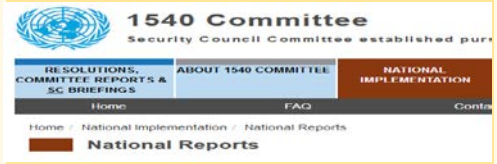
Directive 2009/43/EC of the European Parliament and of the Council of 6 May 2009 simplifying terms and conditions of transfers of defence-related products within the Community

For Resource, click here

Legislation

The resources in this category will guide you to tools that can help to draw up legislation regarding biosecurity. The resources available in this category are primarily intended for legislators, policy makers, management, and biosafety officers. However, other interested parties will find interesting information here as well.

National Reports



Overview of country reports containing information about national biosecurity laws

For Resource, click here

Model law: the Biological and Toxin Weapons Crimes Act

An Act to implement obligations under the 1972 Biological and Toxin Weapons Convention and the 1925 Geneva Protocol

For Resource, click here

International Health Regulations (IHR)

World Health Organization

A legally binding instrument of international law that aims to a) assist countries to work together to save lives and livelihoods endangered by the international spread of diseases and other health risks and b) avoid unnecessary interference with international trade and travel

For Resource, click here

Back to Legislation, Policy & codes

Policy & Codes

The resources in this category will guide you to tools that can help to set up policies regarding biosecurity aspects, or a code of conduct. The resources available in this category are primarily intended for policy makers, management, researchers and biosafety officers. However, other interested parties will find interesting information here as well.

Page 1/2

Enhancing Responsible Science – Considerations for the Development and Dissemination of Codes of Conduct for Dual Use Research Vulnerability scan

This report provides a toolkit for individuals and groups interested in formulating codes of conduct for dual use research and an educational module on dual use research.

For Resource, click here

Dual Use Potential of Life Sciences Research

Code of conduct for risk assessment and risk mitigation

For resource, click here

United States Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern

This policy articulates the practices and procedures required to ensure that dual use research of concern is identified at the institutional level and risk mitigation measures are implemented as necessary.

For resource, click here

A Code of Conduct for Biosecurity

6 Types of Rules of conduct described for which target group.

For resource, click here

Policy & Codes

The resources in this category will guide you to tools that can help to set up policies regarding biosecurity aspects, or a code of conduct. The resources available in this category are primarily intended for policy makers, management, researchers and biosafety officers. However, other interested parties will find interesting information here as well.

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GHSA Action Package

Overview of 11 GHSA Action Packages'

For resource, click here

EU CBRN Action Plan

Council conclusions on strengthening chemical, biological, radiological and nuclear (CBRN) security in the European Union -an EU CBRN Action Plan'

For resource, click here

Code of Conduct on Biosecurity for Biological Resource Centres: procedural implementation

Code of Conduct on Biosecurity for Biological Resource Centres: procedural implementation

Christine Rohde,[1,2] David Smith,[3] Dunja Martin,[1] Dagmar Fritze[1] and Joost Stalpers[4]

[1]Leibniz-Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, Braunschweig, Germany
[2]MIRRI Microbial Resource Research Infrastructure, a Pan European Distributed Infrastructure; Coordination and Contact: Leibniz Institute DSMZ, Braunschweig, Germany
[3]CAB International, Surrey, United Kingdom
[4]CBS-KNAW Fungal Biodiversity Centre, Utrecht, Netherlands

A globally applicable code of conduct dedicated to biosecurity (of microbiologics) and guidance for implementation.

For resource, click here

Self Assessment

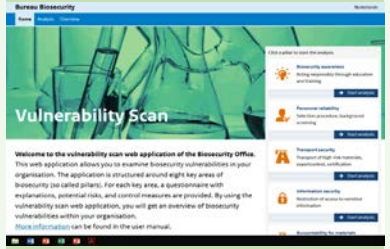
The resources in this category will guide you to tools that can help to draw up legislation regarding biosecurity. The resources available in this category are primarily intended for researchers and biosafety officers. However, other interested parties will find interesting information here as well.

Prior assessment tool

A tool for building laboratory capacity based on a local (Afrika) risk assessment, whereby laboratories are appropriately and optimally tailored to the local risks and to the resources available, both in the short and longer term, without compromising biosafety and biosecurity.

To resource, click here

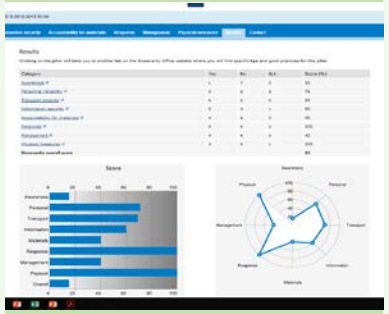
Vulnerability Scan



Identify vulnerabilities in your organization, questionnaires provide insight into eight key areas of biosecurity.

To resource, click here

Biosecurity Self-scan Toolkit



Questionnaire on eight pillars of biosecurity to give an indication of the current level of biosecurity in your organization.

To resource, click here

Joint External Evaluation Tool (JEE)

Tool to assess country capacity to prevent, detect, and rapidly respond to public health threats. Missions reports available.

To resource, click here

Laboratory Mapping Tool (LMT)

A pertinent tool in evidencing and understanding where diagnostic laboratory gaps and strengths are.

To resource, click here

Laboratory leadership competency framework

The purpose of the Framework is to outline the essential competencies needed by laboratory leaders to build and direct sustainable national laboratory systems for disease detection, control and prevention in health systems

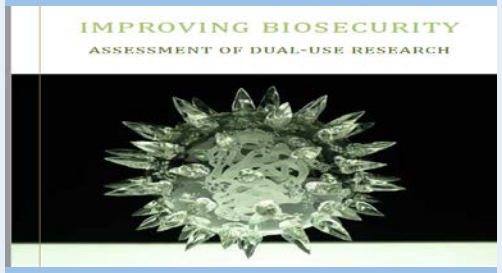
To resource, click here

Risk and threat assessment & management

The resources in this category will guide you to tools that can help to perform Risk identification regarding biosecurity aspects. The resources available in this category are primarily intended for management, researchers and biosafety officers. However, other interested parties will find interesting information here as well.

Page 1/2

Improving biosecurity assessment of dual-use research



Dutch Advisory Report (EN): The Academy hopes its advice will help to bridge the gap between two worlds: the world of researchers in the life sciences and the world of security specialists.

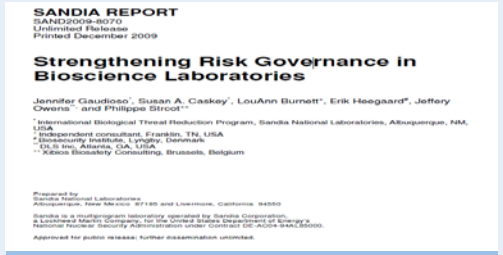
To resource, click here

Harmonization of European Networks by Implementing CWA 15793

A gap analysis was performed to establish the current compliance status of biosafety and laboratory biosecurity management with CWA 15793 in 5 AniBioThreat partner institutes.

To resource, click here

Strengthening Risk Governance in Bioscience Laboratories



This report is intended to help facility managers and policy makers better understand risk governance approaches for laboratories that handle dangerous pathogens.

To resource, click here

Pathogen Safety Data Sheets

Pathogen Safety Data Sheets (PSDSs) are technical documents that describe the hazardous properties of a human pathogen and provide recommendations for work involving these agents in a laboratory setting.

To resource, click here

Risk and threat assessment & management

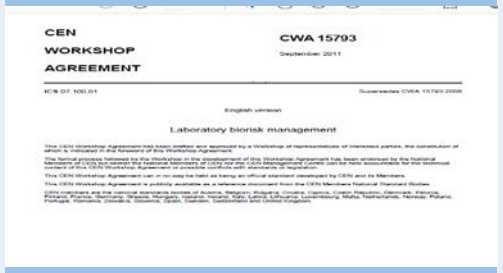
The resources in this category will guide you to tools that can help to perform Risk identification regarding biosecurity aspects. The resources available in this category are primarily intended for management, researchers and biosafety officers. However, other interested parties will find interesting information here as well.

Biorisk Management for Clinical and Public Health Laboratories

This document provides an overview of a comprehensive, systematic approach to laboratory biorisk management..

To resource, click here

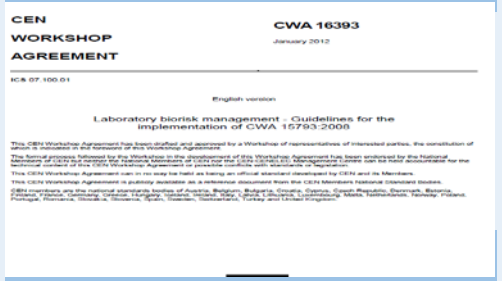
Laboratory biorisk management standard CWA 15793



This CWA will enable organizations to establish and maintain a biorisk management system to control or minimize risk to acceptable levels.

To resource, click here

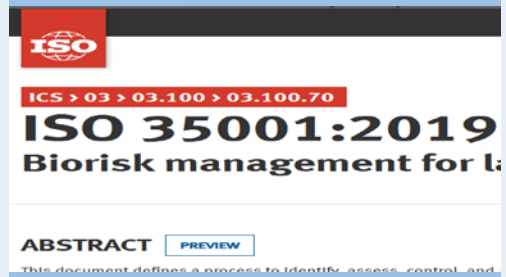
Guidelines for the implementation of CWA 15793:2008



This document was developed as a voluntary standard by an international consortium of biosafety and biosecurity experts through a CEN Workshop (WS 31).

To resource, click here

ISO35001 Biorisk management for laboratories and other related organisations



The biorisk management system: establishes the biorisk management principles that enable laboratories and related facilities to achieve their biosafety and biosecurity objectives.

To resource, click here

BioSafety & Security Training

The resources in this category will guide you to tools that can help to setup a training program for aspect of Biosafety and Biosecurity. The resources available in this category are primarily intended for management, researchers and biosafety officers. However, other interested parties will find interesting information here as well.

Page 1/2

An Analytical Approach (Biosecurity)

The Analytical Approach is a tool developed to assist countries or regions build, modernize, or strengthen their national or regional biosafety and biosecurity systems to mitigate the risks of a natural, accidental or deliberate release of biological agents.

For resource, click here

Next Generation Biosecurity: Responding to 21st Century Biorisks

6-weeks training: Learn about biosecurity, biosafety and bioethics, and why they're vital - inside and outside of the lab

For resource, click here

Laboratory Biosafety and Biosecurity portal

The materials on this portal are provided to be used as part of a biosafety training program specific to your facility.

For resource, click here

Training Materials for Practical Implementation of Laboratory Biosafety, Biosecurity, and Biorisk management

Training materials including mock reviews, a training game, and other interactive exercises to teach participants active learning concepts and approaches for teaching their colleagues and students about laboratory biosafety and biosecurity.

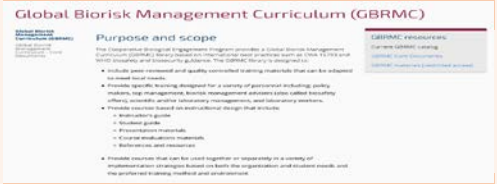
For resource, click here

BioSafety & Security Training

The resources in this category will guide you to tools that can help to setup a training program for aspect of Biosafety and Biosecurity. The resources available in this category are primarily intended for management, researchers and biosafety officers. However, other interested parties will find interesting information here as well.

Page 2/2

Global Biorisk Management Curriculum (GBRMC)



Global Biorisk Management Curriculum (GBRMC) library based on international best practices such as CWA 15793 and WHO biosafety and biosecurity guidance

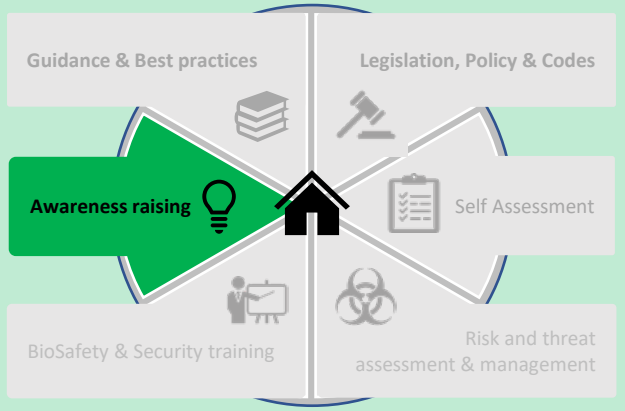
For resource, click here

Biosafety, Biosecurity and the Evaluation of Biohazards Course - Facilitators' Manual

This resource is comprised of an instructor's manual, lecture presentations, student readings, exercises and assignments.

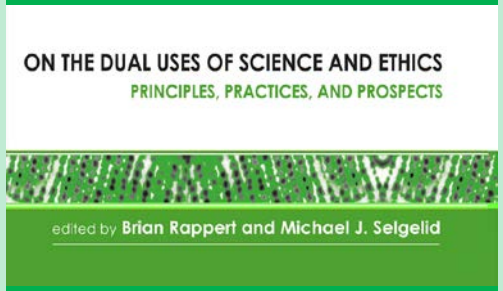
For resource, click here

Awareness raising



The resources in this category will guide you to tools that can assist in raising awareness regarding various aspects of biosecurity. The resources available in this category are intended for a broad target audience, ranging from policy makers to researchers. All parties interested in raising awareness regarding biosecurity will find interesting information here.

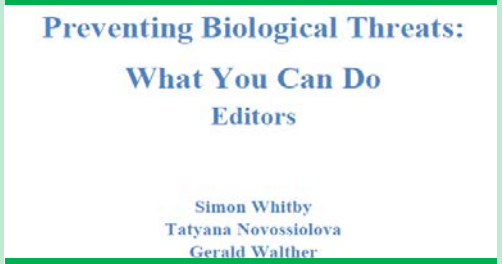
On the Dual Uses of Science and Ethics, Principles, Practices, and Prospects Vulnerability scan



This report examines the potential for the skills, know-how, information, and techniques associated with modern biology to serve contrasting ends.

For resource, click here

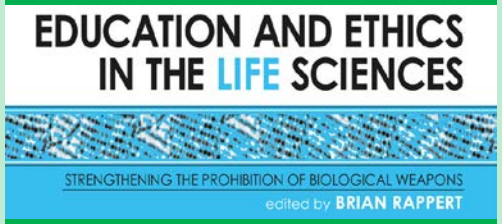
Preventing Biological Threats: What You Can Do



This book, Preventing Biological Threats, is intended to raise awareness and knowledge of biological security of everyone active in the life sciences, ranging from those engaged in research to those engaged in management and policy-making, both nationally and internationally.

For resource, click here

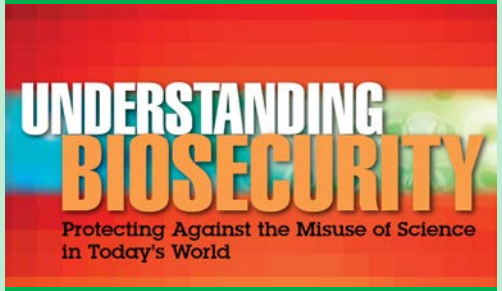
Education and Ethics in the Life Sciences Strengthening the Prohibition of Biological Weapons



Education and Ethics in the Life Sciences examines a variety of attempts to bring greater awareness to security concerns associated with the life sciences.

For resource, click here

Understanding Biosecurity



Protecting the world against the misuse of science in today's world: The challenge and the role of different stakeholders

For resource, click here