Supplementary Material

#	Sub Category	4	3	2	1	Assessments scores		
						A	B	C Current
1	**General Biosafety**	The laboratory has a biosafety and accident prevention program annually reviewed, including regularly reviewed policies and procedures. A biosafety (biorisk) officer or manager has been appointed and empowered.	The laboratory has a biosafety and accident prevention program annually reviewed, including regularly reviewed policies and procedures.	The laboratory staff has access to information about some general biosafety and accident prevention and is generally aware of the biosafety procedures in the laboratory.	There is no specific biosafety or accident prevention information maintained in the laboratory; staff is not fully aware of the biosafety procedures in the laboratory.			
2	**General Security**	The laboratory has a security program (policy and procedures) to protect from theft or misuse of pathogenic agents, toxins, and chemical products. The laboratory has staff responsible and empowered for laboratory security. The laboratory has established a technical committee on Biosecurity.	The laboratory has a security program (policy and procedures) to protect from theft or misuse of selected high risk pathogenic agents, toxins, and chemical products. There is a focal point staff who has been trained/informed on laboratory security but he is not appointed as security officer and is not empowered as such.	The laboratory does not have a security program (policy and procedures) but stores high risk pathogenic agents, toxins, and chemicals securely in the laboratory in order to prevent theft or misuse; the laboratory maintains up to date inventories of the high risks products.	The laboratory does not maintain inventories of stored pathogenic agents, toxins, or chemicals, and does not have separate safe storage facilities for them (e.g. locked freezers).			
3	**Biosafety audits**	Regular (at least annually) biosafety audits (including self-audits) are conducted, corrections are initiated and monitored for effectiveness.	A biosafety audit has been conducted within the past 24 months (by an external auditor), and corrective actions were taken in response to the audit findings.	A biosafety audit was conducted within the last 24 months (by an external auditor or self-audit), but no follow-up has been initiated to correct the problems.	The laboratory has not self-audited or been audited on his laboratory biosafety within the last 24 months.			

4	**Risk assessment**	Risk assessments were used* and are regularly** reviewed for implementing biosafety practices for the handling of pathogenic agents/toxins and for the procedures used in the laboratory.	Risk assessments were used* to determine biosafety practices required for the handling of a subset of pathogenic agents and for the laboratory procedures (e.g. work with specific high-risk agents and toxins), but are not regularly reviewed.	Specific biosafety practices are implemented, staff are aware of the risk assessment approach however risk assessments have not been performed to determine their suitability or a risk assessment have only been performed once to determine the suitability of biosafety practices for few pathogenic agents and for the laboratory procedures and have never been reviewed since then.	Staff understand Good Laboratory Practices (GLP) needed to prevent exposure or cross-contamination in the laboratory, however the GLP may not be consistently used. Staff are not aware of the risk assessment approach.			
5	**Pest control**	The laboratory maintains a pest control and monitoring program for control of disease vectors such as insects, rats, mice, etc.	The laboratory consistently monitors the evidence of pest and responds with specific pest control activities following evidence of insects, rats, mice, etc. in the facility.	The laboratory has access to pest control devices or services, but does not consistently monitor or respond to evidence of insects, rats, mice, etc. in the facility.	The laboratory does not respond to evidence of pests (e.g. rats, mice, insects, etc.) in the facility.			
6	**Medical (occupational health) surveillance programme**	The laboratory has a medical (occupational health) surveillance program including initial staff assessment as well as regular health checks, and the assessment is reviewed or revised following any changes in an individual's health status (e.g. pregnancy, chemotherapy, disease). All the staff has a health insurance through their employment.	The laboratory has a medical (occupational health) surveillance program, which includes initial staff assessment and it is reviewed whenever there is a change in health status (e.g. pregnancy, chemotherapy, disease), but there are no regular health checks.	The laboratory has a medical (occupational health) surveillance program, which includes assessment of staff at the start and in response to an accident (exposure or suspected exposure to high risk pathogenic agents, toxins or chemicals) or to any potential laboratory-related disease.	The laboratory does not monitor staff health; even in case of an accident (exposure or suspected exposure to high risk pathogenic agents, toxins or chemicals) or lab-related disease, the staff may seek medical care at their own expenses. The staff have no Heath Insurance through their employment.			
7	**Vaccination / prophylaxis**	Routine vaccination of staff working with zoonotic agents is offered according to WHO* recommendations (e.g. Rabies, Influenza). Vaccinations records are used.	Vaccination or prophylaxis are offered only on request or following a laboratory exposure (post-exposure vaccination).	Post-exposure vaccination or prophylaxis may be offered, not regularly and only for some pathogens, or in response to a laboratory accident, possibly at a staff's member own expense. Vaccination protocols may not be in accordance to WHO* recommendations. No vaccinations records.	No vaccinations or prophylaxis are offered.			

8	**Emergency documents and emergency response supplies**	The laboratory has agent-specific emergency documents available to all staff (e.g. posted signage, post exposure protocol(s), documented immediate response procedures per agent). Supplies are available to all staff in case of an emergency (e.g. immediate response procedures, eye-wash stations, first-aid supplies, access to medical follow-up). Emergency response simulations are regularly organized.	The laboratory has a general post exposure protocol and supplies are available in case of an emergency (e.g. documented immediate response procedures, eye-wash stations, first-aid supplies, access to medical follow-up). Emergency response simulations are sometimes organized.	The laboratory has no emergency documents, but some response supplies are available to staff in case of an emergency (eye-wash stations, first-aid supplies).	The laboratory has no emergency documents and no emergency response supplies (or available but expired). The laboratory may have a basic first aid kit for emergencies.			
9	**Formal program for accidents, adverse incidents**	There is a formal documented program for all accidents, adverse incidents and situations that could result in accidents and these are reported, documented, investigated, and corrective or preventative measures are taken. Trends and control measures are monitored for effectiveness. The documentation is up to date and available to all staff.	Major accidents and adverse incidents are reported, documented, investigated, and corrective measures taken. Trends and control measures are not monitored for effectiveness. The documentation is available but not updated regularly.	Accidents and adverse incidents are reported and documented only when a medical or security response is required but there is no investigation and no monitoring of trends and control measures. The documentation is not updated regularly and is available to only few staff.	There is no formal program or requirement in place for accidents and adverse incidents. Accidents may or may not be reported. No documentation available.			
10	**Biosafety training availability**	A regular documented and recorded internal and/or external biosafety training* is provided to all staff at least annually, trainer qualifications are documented.	An internal or external biosafety training is provided to selected staff** regularly (once per year) and at the time of hire, and/or no consistent documentation is available.	Only selected staff** are trained, and very rarely (e.g. the biosafety training is provided to selected staff when available through outside sources), but there is a good level of awareness in biosafety.	A biosafety training is not easily available; there are only rare training opportunities for most of the staff in biosafety practices; the awareness level among the staff is low.			
11	**Biosafety training objectives**	The biosafety training addresses the precautions needed for handling specific infectious agents manipulated in the laboratory, including potential routes of exposure, health risks, signs and symptoms, laboratory controls (preventive measures), and	The biosafety training addresses the precautions needed for handling specific infectious agents manipulated in the laboratory, including at least 3 of the following: potential routes of exposure, health risks, signs and symptoms, laboratory controls	The biosafety training addresses the precautions needed for handling specific infectious agents, including at least 2 of the following: potential routes of exposure, health risks, signs and symptoms, laboratory controls (preventive measures), and response to inadvertent exposure.	The biosafety training addresses general Good Laboratory Practices needed for handling infectious agents.			

		response to inadvertent exposure.	(preventive measures), and response to inadvertent exposure.					
12	**Staff management and training (specific to agents)**	Staff are specifically trained and verified competent before working with specific pathogenic agents and using specific procedures), and are managed (supervised) by a trained and competent scientist.	Staff are specifically trained before working with specific pathogenic agents and using specific procedures, and are managed (supervised) by a trained and competent scientist.	Staff receive general training and are managed (supervised) by a trained and competent scientist.	Staff are not trained before working with specific pathogenic agents; they are not or only sometimes managed (supervised) by a trained and competent scientist.			
13	**Training & Competency for Emergency Response**	All staff are regularly trained (annually) and competence in chemical and biological spill-clean-up, including location use of spill-kits and first-aid is verified and exercised on a regular basis (e.g. at least annually).	Staff are trained irregularly (less than once a year) for responding to chemical and biological spills (e.g. location, contents, and use of spill-kits, first aid).	Staff are rarely trained in chemical and biological spill-clean-up, but spill-kits are available in the laboratory for clean-up of chemical and biological spills.	No training in chemical and biological spill-clean-up; no spill-kits available; only disinfectant(s) and paper towels are available in the laboratory to clean-up chemical and biological spills.			
14	**Biosafety Manual**	A biosafety manual, locally adapted* and available in the local or predominant language is always present in the laboratory, is always easily available (several copies may be available) and used by the technical staff and regularly updated and exercised (e.g. annually).	A biosafety manual, locally adapted* and available in the local or predominant language is present in the laboratory, is easily available and used by the technical staff but it is not regularly updated or exercised.	A biosafety manual is present in the laboratory but not easily available to the technical staff and it is not locally adapted and is not translated and not updated regularly .	No biosafety manual is available to the technical staff, or one exists in the laboratory but is not used.			
15	**Biosafety requirements included in SOPs**	Biosafety requirements are included in all technical SOPs (specific to the laboratory and to the practices used), and the associated training* and competency is verified and updated (e.g. at least every two years).	Biosafety requirements are included in most technical SOPs and training* is regularly provided.	Biosafety requirements are included in some technical (general) SOPs, but training* is not regularly provided.	Biosafety requirements are not included in any SOPs.			

16	**Evidence of Good Laboratory Practices (BSL level 2 minimum practices)**	Clear evidence of "good laboratory practices"; appropriate signage in laboratories of "good laboratory practices" rules and regulations; evidence of training and refresher training in "good laboratory practices" for all laboratory and ancillary staff.	Evidence of "good laboratory practices"; appropriate signage in laboratories of "good laboratory practices" rules and regulations; no documentary evidence of training and refresher training in "good laboratory practices" for all laboratory and ancillary staff.	Staff are aware of "good laboratory practices" but do not always follow the rules; no signage in laboratories of "good laboratory practices" rules and regulations. No documentary evidence of training and refresher training in "good laboratory practices" for all laboratory and ancillary staff.	No evidence of "good laboratory practices"; no appropriate signage; clear contraventions of "good laboratory practices" by staff evident during audit.			
17	**Good Lab Practices enforcement (BSL level 2 minimum practices)**	The laboratory enforces a policy of not storing of food, eating, drinking, smoking, applying make-up, or handling contact lenses in work areas.	The laboratory enforces a policy of not storing of food, eating, drinking, smoking, in the work areas and discourages applying make-up, and handling contact lenses in work areas.	The laboratory does not allow storing of food, eating, drinking, and smoking in work areas.	The laboratory discourages staff from eating and drinking in the work area, but does not enforce a rule.			
18	**Laboratory Housekeeping**	Well maintained laboratory with high standard of general cleanliness and housekeeping per established housekeeping standards *	Well maintained laboratory with inconsistent and/or undocumented housekeeping standards to follow.	The laboratory is maintained and clean but there are no consistent or documented housekeeping standards to follow.	Obvious lack of systematic cleaning and/or housekeeping (laboratory not maintained properly).			
19	**SOPs for cleaning and disinfection**	Detailed* instructions (Standard operating procedures- SOPs) for cleaning and disinfection and records showing completion are available; trained staff are assigned to this duty** and checking procedure for cleaning/disinfection efficacy is implemented	Detailed* instructions for cleaning and disinfection and records showing completion are available and evidence that cleaning processes are followed; staff are not assigned to this duty and may have not received training.	No instructions for cleaning and disinfection or records showing completion are available but there is evidence that cleaning processes are being followed. There is no staff assigned to this duty.	No instructions for cleaning and disinfection. No staff assigned to this duty.			
20	**Disinfectants use and labeling**	Disinfectants are verified as appropriate for the pathogenic agents being used*; all disinfectants are clearly labeled and have a preparation and expiry date; staff are aware of contact times for inactivation; their use is incorporated into SOPs**	SOPs for disinfection may be available, and disinfectant used per protocols, but there is no verification of effectiveness for the pathogenic agents being used*and/or no justification; disinfectants are labeled but may have inconsistencies or absences of preparation and expiry dates.	Inconsistent application of disinfectants, without an evidence base; disinfectants may be labeled but with inconsistencies or absence of preparation and expiry dates; SOPs for disinfection are not available	No disinfectants used or inappropriate disinfectants or inconsistent use of disinfectants are normally applied. SOPs for disinfection are not available.			

21	**Biological or chemical indicators (Autoclaves)**	Biological indicators are used to verify autoclave performances at least daily when an autoclave/sterilizer is used for disinfection/ decontamination purposes.	Biological or chemical indicators are used to verify autoclave/sterilizer performances when used for disinfection/ decontamination purposes, on a routine schedule (weekly, monthly).	Biological or chemical indicators are available to verify autoclave/sterilizer performances, but they are not consistently used.	Chemical indicators are not used to verify autoclave performances.			
22	**Biosafety Equipment Maintenance**	All critical biosafety equipment has a documented maintenance schedule and current maintenance verification record.	All critical biosafety equipment is maintained regularly but there are no schedule or records showing completion exist	All critical biosafety equipment is serviced when the equipment shows signs of wear or failure	Equipment maintenance and service are not consistent			
23	**Risk Assessment for biocontainment**	A risk assessment for biocontainment of all high consequence pathogens and all biological hazards has been conducted; in line with national regulation.	A risk assessment for biocontainment of some high consequence pathogens has been conducted.	No risk assessment has been conducted, but biocontainment of high consequence pathogens and general handling of biohazards has been discussed among the director and staff.	No risk assessment has been conducted and biocontainment of high consequence pathogens or biohazards has not been discussed.			
24	**Access security measures**	The laboratory area has restricted access with signs indicating this restriction. The access to BS-laboratories and freezer rooms is completely controlled and restricted to approved and authorized staff by use of security system (e.g. biometric system, ID-badges, camera, Radio Frequency Identification (RFID) cards, documented key control).	The laboratory area has restricted access with signs indicating this restriction. The access to BS-laboratories and freezer rooms is controlled and restricted to approved and authorized staff;: doors are lockable but there is no way to verify access	The laboratory area has restricted access with signs indicating this restriction. The access to BS-laboratories and freezer rooms is controlled and restricted to approved and authorized staff but there are no locks.	There is no restricted access to the laboratory area: there is easy access to all laboratories and freezers / refrigerators during working hours.			
25	**Training and competency for level BSL 2 agents manipulation**	Staff are regularly trained (more than one time per year or whenever changes are made) and verified competent* about pathogenic agent (level BSL2) manipulation and managed by a competent scientist; documentation indicating completion of training and competency is available and recorded.	Staff are irregularly trained (training does not occur annually or whenever changes are made) about pathogenic agent (level BSL2) manipulation and managed by a competent scientist*; documentation indicating completion of training and competency is sometimes available but not recorded.	Staff are not trained about pathogenic agent (level BSL2) manipulation but are managed by a competent scientist.	Staff are not trained about pathogenic agent (level BSL2) manipulation and not managed by a competent scientist.			

26	**biohazard signage (containment BSL 2 level)**	The international biohazard pictogram/ biohazard symbol is located on the front of the door where all information is included and accurate* (see guidance for information).	The international Biohazard pictogram/biohazard symbol is located on the front of the door where information is included but it is incomplete; however it contains at least two of the required details * (see guidance for information).	The international Biohazard pictogram/biohazard symbol is located on the front of the door but no other information is provided or the information provided is not accurate.	There is no biohazard signage on the door of laboratory.			
27	**Potentially infectious samples manipulation (level BSL 2)**	All potentially infectious samples with a potential for creating infectious aerosols or splashes are manipulated within a biological safety cabinet (BSC) or any other primary containment device*; all staff using a biological safety cabinet are regularly trained in its use and the competency is documented**.	All potentially infectious samples with a potential for creating infectious aerosols or splashes are manipulated within a BSC or any other primary containment device*; staff are not trained or infrequently trained in the use of a biological safety cabinet and the competency is not documented.	Some potentially infectious samples with a potential for creating infectious aerosols or splashes are manipulated in a BSC or any other primary containment device*; staff are not trained or infrequently trained in the use of a biological safety cabinet and the competency is not documented.	None of the infectious samples or potentially infectious samples with potential aerosol creating risk are handled in a BSC, or no BSC is available.			
28	**Emergency response plan in case of major failure (BSL 2 level)**	The laboratory has a response plan, including a documented agreement in place with another organization for hosting biohazard samples in case of major failure (electricity, pressure, etc).	The laboratory has a response plan in place with another organization for hosting biohazard samples in case of major facility failure (electricity, pressure, etc).	The laboratory has a response plan in place that requires destruction of biohazardous samples in case of major facility failure (electricity, pressure, etc).	The laboratory has no emergency response plan for handling biohazard samples in case of a major facility failure.			
29	**Infectious samples handling in a BSC (BSL3 level)**	All infectious samples are manipulated in a biological safety cabinet or any other primary containment device; all staff using a biological safety cabinet are regularly trained in its use and the competency is documented.	All infectious samples are manipulated in a biological safety cabinet or any other primary containment device; staff are not trained or infrequently trained in the use of a biological safety cabinet and the competency is not documented.	Some infectious samples are manipulated in a biological safety cabinet or any other primary containment device; staff are not trained or infrequently trained in the use of a biological safety cabinet and the competency is not documented.	None of the infectious samples are handled in a BSC, or no biological safety cabinet available.			
30	**Biohazard signage (containment BSL 3 level)**	The international Biohazard pictogram/biohazard symbol is located on the front of the door where all information is included* and accurate (see guidance for information).	The international Biohazard pictogram/biohazard symbol is located on the front of the door where information is included but it is incomplete ; however it contains at least two of the required detail * (see guidance for information).	The international Biohazard pictogram/biohazard symbol is located on the front of the door but no other information is provided or the information provided is not accurate.	There is no biohazard signage on the door of laboratory.			

31	**Training and competency for level BSL 3 agents manipulation**	Staff are regularly trained (at least once a year) about pathogenic agent (level 3) manipulation and managed by a competent scientist. Emergency response simulations or drills are regularly organized. Documentation indicating completion of training and competency is available.	Staff are irregularly trained (less than once a year) about pathogenic agent (level 3) manipulation and managed by a competent scientist. However documentation of training and competency is inconsistently available.	Staff are not trained about pathogenic agent (level 3) manipulation but are managed by a competent scientist.	Staff are not trained about pathogenic agent manipulation and not managed by a competent scientist.			
32	**Facility manager BSL3 operations**	A full-time facility manager is appointed and is responsible for the daily operations of the laboratory; an operations manual is available and is up-to-date, indicating emergency procedures and routine procedures in the BSL3 facility. No external company is employed for cleaning the BSL3 facilities and trained* staff are assigned to this duty.	A facility manager is appointed and is responsible for the daily operations of the laboratory but this is only a part-time position as he/she has other responsibilities. An operations manual is available and is up-to-date indicating emergency procedures and routine procedures in the BSL3 facility. No external company is employed for cleaning the BSL3 facilities and trained* staff are assigned to this duty.	A facility manager is appointed and is responsible for the daily operations of the laboratory but this is only a part-time position as he/she has other responsibilities; an operations manual is available but is not up-to-date. No external company is employed for cleaning the BSL3 facilities but no staff are assigned to this duty or are not trained.	There is no facility manager and there is no operations manual. An external company is employed for cleaning the BSL3 facilities.			
33	**Certification (International or national regulations) for BSL3 operations**	The laboratory is certified consistent with the recommendations of the most current CDC BMBL current edition, or WHO LBM BSL3 recommendations (or other national regulations) on an regular schedule; failure scenarios are simulated to ensure that all backup systems are working as expected and this is documented*; this may be performed by third-party auditor or internal engineering/ biosafety group.	The laboratory is certified consistent with the recommendations of the most current CDC BMBL current edition or WHO LBM BSL3 recommendations (or other national regulations), but this was only performed during commissioning and not on an regular schedule; failure scenarios are simulated to ensure that all backup systems are working as expected and this is documented; this may be performed by third-party auditor or internal engineering/ biosafety group.	The laboratory is certified consistent with the recommendations of the CDC BMBL current edition or WHO LBM BSL3 recommendations (or other national regulations) but this was only performed during commissioning and not on an regular schedule; failure scenarios are not simulated to ensure that all backup systems are working as expected and this is documented.	The laboratory has never been certified consistent with International or national regulations for a BSL3 laboratory.			

34	**Annual maintenance plan for the BSL3 Laboratory**	An annual maintenance planexists for the BSL3 Laboratory and a sufficient maintenance budget is set aside for routine and exceptional maintenance requirements.	An annual maintenance plan exists for the BSL3 Laboratory but the budget that allows for routine and exceptional maintenance requirements may be insufficient.	An annual maintenance plan exists for the BSL3 Laboratory but the budget is insufficient and only allows for the most basic of maintenance requirements.	There is no annual maintenance plan or budget for the BSL3 Laboratory.			
35	**Directional negative pressure air flow for BSL3 ventilation**	The facility has directional negative pressure air flow to a minimum of -50pa differential pressure with the outside corridor; pressure gauges or other status indicators show the pressure differential on the outside and inside of the laboratory which is recorded; alarms are present and regularly tested to indicate a loss of negative pressure.	The facility has directional negative pressure air flow to a minimum of -50pa differential pressure with the outside corridor; pressure gauges or other status indicators show the pressure differential on the outside and inside of the laboratory; alarms are present but are not regularly tested to indicate a loss of negative pressure.	The facility has directional negative pressure air flow that aims to meet a minimum of -50pa differential pressure with the outside corridor; pressure gauges or other status indicators show the pressure differential only on the outside of the laboratory and are not accessible by users; alarms are not present to indicate a loss of negative pressure.	The facility has directional negative pressure air flow but it is not known what is the level of differential pressure with the outside corridor; pressure gauges or other status indicators showing the pressure differential are not present; alarms are not present to indicate a loss of negative pressure.			
36	**Supply and exhaust air filter for BSL3 ventilation**	Both supply and exhaust air are HEPA filtered*. The HEPA filters are scanned annually to suitable international or national standards**.	Supply and exhaust air may be HEPA filtered. The HEPA filters are not scanned annually to suitable international or national standards.	Supply and exhaust air are not filtered but the exhaust air does have a minimum 5 meter stack.	Supply and exhaust air are not filtered; the exhaust air does not have a minimum 5meter stack.			
37	**Waste Disposal containment and rendered non infectious**	The laboratory policies and procedures ensure that all waste* are properly contained (flow chart of waste described**) and as necessary rendered and verified *** noninfectious prior to disposal. The decontamination system has been validated at least one time.	The laboratory policies and procedures (flow chart of waste described**) ensure that all waste are properly contained and as necessary rendered but not verified*** as being noninfectious. The decontamination system has been validated at least one time.	Disinfection and containment occur, but there are no laboratory policies and procedures specific to waste disposal (no flow chart of waste described**) . The decontamination system has not been validated.	Laboratory waste is not appropriately handled (not contained, not rendered noninfectious, not disposed of).			
38	**Incinerator**	The incinerator meets the requirements for the laboratory and its maintenance is performed on a specified schedule; constant availability of fuel for the incinerator.	The incinerator is available and properly maintained but does not meet the requirements for the laboratory.	The incineration is available but does not meet the requirements for the laboratory (incinerator poorly maintained or waste fully incinerated (fully burned to ash) in an enclosed/restricted access fire pit).	The incinerator is not maintained or is inoperable.			

39	**Waste management**	There is a proper waste management by frequent and appropriate use of incinerator, autoclave, chemical waste treatment/disinfectant* and disposal.	There is a frequent and appropriate use of incinerator and autoclave**. The chemical waste treatment is partially addressed.	There is no chemical waste treatment. An Incinerator or a mean to incinerate waste ((fully burned to ash) in an enclosed/restricted access fire pit) and an autoclave are used only in situations where the lab deals with specific bio agents.	There is an improper waste management: either there is no incinerator (or not functional or waste may be insufficiently incinerated in an open fire pit (may be unattended during the process, or there is no verification that materials are fully burned to ash)) and/or no autoclaving (or not functional) of infectious material.			
40	**Sharps for Disposal**	Sharps for disposal (e.g. needles, broken glass, etc.) are separated from routine laboratory wastes into hazard-labeled hard-shell containers in order to prevent accidental stick or cut injuries.	Sharps for disposal (e.g. needles, broken glass, etc.) are separated from routine laboratory wastes into hard-shell containers in order to prevent accidental stick or cut injuries.	Sharps for disposal (e.g. needles, broken glass, etc.) are separated from routine laboratory wastes in order to prevent accidental stick or cut injuries.	Sharps (e.g. needles, broken glass, etc.) are disposed of with routine laboratory waste.			
41	**Equipment and disposable materials availability**	There is sufficient and appropriate equipment* and disposable materials; infectious and chemical waste disposal are available.	There is sufficient but inappropriate equipment* and disposable materials; infectious and chemical waste disposal are available.	There is Insufficient (inconsistent supply) and/or inappropriate equipment* and disposable materials; infectious and chemical waste disposal are available.	There is no equipment and disposable materials; infectious and chemical waste disposal are not available.			
42	**Specimen reception and distribution**	There is a designated area for specimen reception that includes appropriate biological safety equipment and PPE; there are clear SOP for accessing samples into a LIMS* and for how a sample is to be distributed safely to the appropriate laboratory/department for processing. there are clear SOP about leaking/suspicious packages, and appropriate materials to deal with those.	There is a designated area for specimen reception that includes appropriate biological safety equipment and PPE; there is no clear system for accessing samples into a LIMS* and for how a sample is to be distributed safely to the appropriate laboratory/department for processing. There are clear SOP about leaking/suspicious packages, and appropriate materials to deal with those.	There is a designated area for specimen reception but it lacks basic safety equipment such as a biosafety cabinet and PPE; there is no apparent system for safe distribution of samples or recording information.	There is no designated area for specimen reception; there is no apparent system for safe distribution of samples or recording information.			

43	**Training & Competency for Infectious Agent Shipment**	More than one staff that ship infectious materials are trained and certified* to ship according to current national and international regulations. Certificates are updated regularly (e.g. at least every two years). Staff is aware of national and international regulations and has access to current regulations.	Only one person in the laboratory has been trained (and has an up-to-date certification) to package and ship infectious materials according to national and international regulations; additional lab staff may also package and ship infectious materials.	The laboratory is aware of responsibilities regarding shipping of infectious substances according to current national and/or international regulations but currently does not have any personnel trained and/ or certified to do this duty (out-of-date certification); however the laboratory packages and ships infectious materials in accordance with national and international regulations.	The laboratory is unaware of responsibilities regarding shipping of infectious substances according to current national and/or international regulations and does not have any personnel trained and/or certified to do this duty.			
44	**Packaging of infectious materials**	Clear instructions for packaging of infectious material are available; shipping containers are available for local transportation and meet international and national transportation requirements.	Clear instructions for packaging of infectious material are available; shipping containers for local transportation that meet international and national transportation requirements are inconsistently available.	Instructions for packaging of infectious material are available; shipping containers for local transportation meeting international and national transportation requirements are not available.	There are no instructions for the packaging of infectious materials and no appropriate shipping containers.			
45	**Records of infectious Agent Shipment**	Records of infectious materials shipped* are maintained, including item(s), quantity, shipper, recipient, date, courier, and notation/copy of relevant permit(s) or authorizations.	Records of infectious materials shipped* are maintained, including item(s), shipper, recipient, date, and courier.	A list of infectious materials shipped* from the laboratory could be generated from courier records.	The laboratory does not maintain records of infectious items shipped.			
46	**Reusable secondary container for shipment**	When receiving diagnostic samples the secondary container (i.e. shipping box) and packing materials if compromised, contaminated, or damaged are not reused.	When receiving diagnostic samples the secondary container (i.e. shipping box) and packing materials are visually inspected, and if needed are decontaminated and reused.	When receiving diagnostic samples the secondary container (i.e. shipping box) and packing materials are visually inspected and if appearing clean are reused.	When receiving diagnostic samples the secondary container (i.e. shipping box) and packing materials are reused, regardless of integrity or contamination.			
47	**Experiment or animal facility accreditation**	The experiment or animal facility is accredited or certificated by an appropriate international (such as AAALAC) or national authority and the animal facility is properly confined (e.g. restricted access, separate building).	The experiment or animal facility is accredited by a government authority and can demonstrate progress for an appropriate international or national authority accreditation.	The experiment or animal facility is accredited by a government authority but not by an appropriate international or national authority and does not or have not started the roadmap process for accreditation.	The experiment or animal facility is not accredited by a government authority or an international authority.			

48	**Staff accreditation for animal care and use**	All staff working with laboratory animals are accredited by their national Government agency or an international body as being proficient to work with animals and the licenses are up-to-date.	Some (> 50%*) but not all staff working with laboratory animals are accredited by their national Government agency or an international body as being proficient to work with animals and the licenses are up-to-date.	Some (> 50%) or all staff working with laboratory animals have been previously accredited by their national Government agency or an international body as being proficient to work with animals but the licenses are not up-to-date.	None of the staff working with laboratory animals are accredited by their national Government agency or any international body as being proficient to work with animals.			
49	**Animal ethics committee**	The laboratory has an animal ethics committee that reviews all protocols involving animal use. The committee has clear terms of reference that includes the regularity of the meetings, and the composition of the committee.	The laboratory has an animal ethics committee that reviews all protocols involving animal use; the committee does not have clear terms of reference.	There is no animal ethics committee for (or with oversight for) the laboratory but management are aware of their responsibilities.	There is no animal ethics committee and management is unaware of their responsibilities in this area.			
50	**Animal waste decontamination**	All animal waste is appropriately decontaminated or sterilized prior to removal from the experimental animal facility*; decontamination efficiency is verified using biological indicators on every cycle.	All animal waste is appropriately decontaminated or sterilized prior to removal from the experimental animal facility*; the efficiency of the decontamination equipment is not regularly verified using biological or chemical indicators.	All animal waste is appropriately decontaminated or sterilized prior to removal from the experimental animal facility; however the capacity is insufficient; the efficiency of the decontamination equipment is never verified using biological or chemical indicators.	No animal waste is appropriately decontaminated or sterilized prior to removal from the facility			
51	**Equipment for animal waste disposal**	The experimental animal facility has specialized equipment for the disposal of animal waste and it is operational. Carcass waste is dealt with efficiently (for both small and large animals if applicable) without buildup of carcasses and other related waste, and an adequate cold storage is available for carcasses in case of back log. Alternatively, there may be a commercial arrangement for the disposal of carcasses. SOPs relating to animal waste disposal are available.	The experimental animal facility has some specialized equipment for the disposal of animal waste and it is operational. There may be a commercial arrangement in place for the disposal of animal waste. Carcass waste (small and/or large animals) tends buildup causing problems.	The experimental animal facility has specialized equipment for the disposal of animal waste but it is not operational due to problems with commissioning or breakdown. There is no commercial arrangement for the disposal of carcasses. Disposal of carcass waste is a problem.	The experimental animal facility has no specialized equipment for the disposal of animal waste. The disposal of carcasses and other animal waste is not dealt with appropriately.			

52	**Medical (occupational health) surveillance programme for staff working with animals**	The experimental animal facility has the required occupational health and safety requirements for staff working with experimental animals including vaccination and post exposure protocol medicines.	The experimental animal facility has the required occupational health and safety requirements for staff working with experimental animals; vaccinations are provided for some staff however there is no post exposure protocol medicines.	The experimental animal facility has inconsistent or poorly understood occupational health and safety practices; staff may or may not have vaccinations and these would occur at their own expense.	The experimental animal facility has no occupational health and safety considerations for animal care staff.			
53	**Specialized PPE for experimental animal facility**	The experimental animal facility has specialized PPE for working with experimental animals including respirators, boots, coveralls and goggles; staff are regularly trained in donning and doffing and disposal of PPE.	The experimental animal facility has sufficient specialized PPE for working with experimental animals including respirators, boots, coveralls and goggles. Staff are not regularly trained in donning and doffing and disposal of PPE.	The experimental animal facility has some of the specialized PPE required for working with experimental animals however there are not in sufficient quantities. Staff are not regularly trained in donning and doffing and disposal of PPE.	The experimental animal facility has some or no specialized PPE for animal work. Staff are aware that they should be wearing PPE.			
54	**Premises- biological quarantine requirements**	The laboratory staff is never involved in taking samples during active surveillance. If applicable*, laboratory staff is required to follow an obligatory quarantine** period of 3-7 days (depending on pathogens manipulated) before entering any animal holding facility. The laboratory maintains a list of pathogens that require quarantine, species affected, and the required quarantine period for affected staff.	The laboratory staff is not (or only in emergency situations) involved in taking samples during active surveillance and generally follows a quarantine period of 1-3 days (if applicable* depending on pathogens manipulated) before entering any animal holding. The laboratory maintains a list of pathogens that require quarantine, species affected, and the required quarantine period for affected staff.	The laboratory staff is sometimes or often actively involved in taking samples from animals (esp. in outbreak times) but follows a quarantine period of 1-3 days prior entering any animal holding facility (if applicable* depending on pathogens manipulated). The laboratory maintains a list of pathogens that require quarantine, species affected, and the required quarantine period for affected staff.	The laboratory staff is actively involved in taking samples from farm / domestic animals without prior quarantine period (if applicable*).			
55	**Local and national regulations for premises knowledge and enforcement**	The laboratory management is aware of national and local public works regulations and attests that the premises conform to regulations, in particular with regard to the standards of resistance of materials used for construction in case of natural disaster. There are clear SOPs (policies and procedures that relate to national and local conformity).	The laboratory management is aware of national and local public works regulations and attests that the premises conform to regulations , in particular with regard to the standards of resistance of materials used for construction in case of natural disaster. SOPs are inconsistent regarding regulations and requirements.	The laboratory management is unaware if the laboratory premises meet local and national regulations; however there is a high likelihood that this is the case.	The laboratory management is unaware if the laboratory meets local and national regulations, or is aware but does not apply the regulations and it is unlikely it will meet any of the regulatory construction requirements.			

56	**Premises' comfort and level of quality**	The laboratory is constructed to a high level of quality and is it a comfortable place of work; the working space is sufficient for the activities to be performed; the temperature of the laboratory is monitored and controlled to a comfortable level using air conditioning or heating. Noxious odors and fumes do not impact on staff comfort/health.	The laboratory is constructed to a high level of quality and is it a comfortable place of work; but the working space is not sufficient for the activities to be performed; the temperature of the laboratory is controlled to a comfortable level using air conditioning or heating. Noxious odors and fumes do not impact on staff comfort/health.	The laboratory is old and is purpose-built for laboratory activities. The laboratory design is reasonably functional but requires refurbishment to meet international standards; there may or may not be air conditioning available to regulate the temperature; noxious odors and fumes are not controlled.	The laboratory is old and is not purpose-built for laboratory activities. The work areas may be cramped and there is no air conditioning to regulate the temperature. Noxious odors and fumes are not controlled.			
57	**Work areas including benching and illumination quality.**	The work areas including benching and illumination are of a high quality. Bench is constructed of a chemical-resistant material with coved splash board and rounded edges. Illumination/lighting is sufficiently bright (>500 lux) and is arranged to meet the tasks requirement*.	The work areas including benching and illumination are of a high quality. Bench is constructed of a chemical resistant material with coved splash board and rounded the edges. Illumination/lighting is sufficiently bright (>500 lux) however it is not arranged to meet the tasks requirement*.	The work areas including benching are of a medium quality. Bench is constructed of an unknown material that may be chemical resistant material. Illumination/lighting is sufficiently bright (>500 lux); however it is not arranged to meet the tasks requirement*.	The work areas including benching are of poor quality; bench is constructed of a wood or non-chemical resistant material - there are no rounded edges. Illumination/lighting might also be insufficiently bright (<500 lux).			
58	**Hand washing sink**	Each laboratory (including animal facilities) contains a hand washing sink that is of the "hands-free" variety, is located in an appropriate area of the laboratory and is designated as a hand washing sink. It has appropriate disinfectant for a hand washing and there is a sign or job aid indicating the correct method to wash hands.	Each laboratory (including animal facilities) contains a hand washing sink that is located in an appropriate area of the laboratory and is designated as a hand washing sink. It has appropriate disinfectant or soap for a hand washing but there is no sign or job aid indicating the correct method to wash hands.	Each laboratory contains a sink (not designated as a hand washing sink) that is located in an appropriate area of the laboratory but is not designated as a hand washing sink. The hand washing sink may have appropriate disinfectant or soap for a hand washing but there is no sign or job aid indicating the correct method to wash hands.	There is no designated hand washing sink.			
59	**Access to lockers or storage shelves**	Each staff member has a locker located outside of the laboratory facility to store their possessions* so they do not take them with them into the laboratory (e.g. purses, backpacks, cell phones, etc).	Staff members share a locker or shelf located outside of the Laboratory facility to store their possessions* (e.g. purses, backpacks, cell phones, etc) so they do not take them with them into the laboratory.	Each staff member has a locker or shares a locker or shelf located INSIDE of the laboratory facility to store their possessions* (e.g. purses, backpacks, cell phones, etc).	Staff members do not have access to lockers or storage shelves for their personal belongings.			

60	**Necropsy**	The pathology department is sufficiently equipped to carry out necropsies of various sized animals including large animals*. There are good biocontainment and safe working conditions**, and appropriate exposure control measures are in place and practiced. All necropsies are conducted or supervised by specifically trained and/or experienced (>5 years) pathologists. The volume of activity is sufficient to maintain the needed skills.	The pathology department is sufficiently equipped to carry out necropsies of various sized animals including large animals*. Biocontainment and safety measures*** are in place but are not fully respected (e.g. inadequate PPE, insufficient cleaning and disinfection, incorrect biocontainment of diagnostic materials, poor effluent management). All necropsies are conducted or supervised by specifically trained and/or experienced (>5 years) pathologists, but the volume of activity is not sufficient to maintain needed skills.	The pathology department can carry out necropsies of some species. Few biocontainment and safe working conditions* are in place and are not consistently respected (e.g. inadequate PPE, insufficient cleaning and disinfection, incorrect biocontainment of diagnostic materials, poor effluent management.) Necropsies are not consistently conducted by specifically trained and/or experienced (>5 years) pathologists.	The pathology department lacks basic facilities and equipment appropriate for necropsies. Biocontainment and safe working conditions* are not in place or respected. Nobody in the laboratory has experience in necropsy .			
61	**Separation of chemicals**	Chemical substances* are correctly and safely stored in minimal amounts in approved cabinets**; appropriate signage is used; appropriate separation of chemicals is applied***; emergency procedures are documented and staff is trained in actions.	Chemical substances* are correctly and safely stored in minimal amounts in approved cabinets,** appropriate signage is used; appropriate separation of chemicals is applied. But the emergency procedures are not documented and staff is not trained in actions.	Chemical substances* are inconsistently stored in large volumes****. Appropriate signage may be evident. There is no separation of chemicals. The emergency procedures are not documented and staff is not trained in actions.	Chemical substances* are inappropriately and unsafely stored in large amounts****. There is no appropriate signage.			
62	**Compressed gases**	Compressed gas cylinders* are stored outside of the laboratory and restrained to prevent falling; regulators are tested annually (and it is documented) and replaced every 5 years (as a minimum); oxygen monitoring is evident if it is required. The documentation on risk assessment is available and recorded. Suitable PPE is provided on a risk assessment basis. Piping system is regularly inspected for safety.	Compressed gas cylinders* are stored inside of the laboratory and restrained to prevent falling; regulators are tested annually (and it is documented) and replaced every 5 years (as a minimum); oxygen monitoring may be evident if it is required. The documentation on risk assessment is sometimes available but not recorded. PPE is provided but it may not be suitable.	Compressed gas cylinders* are stored inside of the laboratory and restrained to prevent falling; regulators are tested annually (documented) and replaced every 5 years (as a minimum); there is no oxygen monitoring evident. There is no documentation on risk assessment. No PPE is available.	Compressed gas cylinders* are stored inside of the laboratory and not restrained to prevent falling; regulators are not tested annually (and it is not documented) and not replaced every 5 years (as a minimum); there is no oxygen monitoring evident.			

63	**Liquefied gases**	Liquefied gas dewars or cylinders* are stored in an external, dedicated limited access area of the laboratory. Cylinders or dewars are restrained to prevent falling. Inside the laboratory, the liquefied gas or general gas area is well-ventilated with oxygen monitoring evident; SOPs and regular training are in place regarding safe use and risks** including use of PPE*** which is available.	Liquefied gas dewars or cylinders* are stored in a dedicated area INSIDE the laboratory and restrained to prevent falling and with limited access. Inside the laboratory, the liquefied gas area or general gas area is well-ventilated with oxygen monitoring evident. SOP and regular training may or may not be in place regarding safe use but staff are aware of risks**. PPE may be available.	Liquefied gas dewars or cylinders* are stored in the working laboratory and restrained to prevent falling (where required), but the access is not limited and there is no oxygen monitoring. SOP and training may or may not be in place regarding safe use but staff are aware of risks**. PPE may be available.	Liquefied gas dewars or cylinders* are stored in the working laboratory. There are no safety precautions in place, no SOPs, no training and staff are unaware of risks**.			
64	**Radiation - personnel protection and physical protection**	Appropriate personal safety measures* for radiation are in place. Appropriate physical safety measures** for radiation are in place. Radiation surveys are conducted regularly.	Appropriate personal safety measures* for radiation are in place. Physical safety measures** for radiation are in place but may be inconsistent.	Personal safety measures* for radiation are in place but there is a lack of rigor and they are inconsistent. There is a lack of appropriate physical safety measures** for radiation.	There is no personal l safety measures* for radiation in place. There are no physical safety measures** for radiation in place.			
65	**Radiation protection officer**	A radiation protection officer is appointed, regularly trained (annually) and currently certified*; an appropriate site specific reference manual is available for consultation.	A radiation protection officer is trained (not regularly) but is not currently certified*, and an appropriate reference manual is available for consultation.	A radiation protection officer is appointed but has never been trained and is not certified and there is an appropriate reference manual available for consultation but it has not been adapted specifically for the laboratory.	There is no radiation protection officer and no appropriate reference manual is available for consultation.			
66	**Radiation spill kit**	A radiation spill kit is evidenced and staff is trained (annually) and practiced in its use. SOP for radiation spill is available with the radiation spill kit.	A radiation spill kit evidenced and staff trained irregularly and practiced in its use. No SOP for radiation spill is available with the radiation spill kit.	Radiation spill kit evidenced and staff not trained and not practiced in its use. SOP for radiation spill may be available with the radiation spill kit.	No radiation spill kit evidenced.			
67	**Chemical waste**	Chemical waste is dealt with appropriately, stored appropriately and segregated until collected. Final disposal is performed by an approved commercial contractor. SOPs regulate the procedures for disposal. The practices are in compliance with national,	Chemical waste is dealt with inconsistently. Chemical waste is stored separately until collection but may not be segregated. Final disposal is performed by an approved commercial contractor. SOPs regulate the procedures for disposal. Compliance with	It is not clear if chemical waste is dealt with appropriately. Chemical waste may be stored separately until collection but is not segregated. It is not clear where final disposal is performed or by whom. There are no SOPs to regulate the procedures for disposal.	Chemical waste is not dealt with appropriately with regard for safety or the environment. There are no SOPs to regulate the procedures for disposal..			

		regional, and local regulations.	national, regional, and local regulations is inconsistent.					
68	**Chemicals storage**	Chemicals are appropriately stored, labeled and separated. Safety Data Sheets (SDS) are accessible ~~f~~or each chemical present in each department.	Chemicals are appropriately stored, labeled and separated. SDS may be accessible but for not all chemicals in each department.	Chemicals are inappropriately stored, labeled and separated. SDS may be available.	Chemicals are inappropriately stored, labeled and separated. SDS are not available.			
69	**Chemical safety officer**	A chemical safety officer is appointed, trained (annually) in appropriate safety techniques and the appointment is documented in the laboratory safety manual.	A chemical safety officer is appointed, but not trained regularly and the appointment is documented in the laboratory safety manual.	A chemical safety officer is appointed, but not trained and the appointment is not documented in the laboratory safety manual.	There is no chemical safety officer appointed. .			
70	**Chemical spill kit**	A chemical spill kit is evidenced and staff are trained (annually) and practiced in its use. SOP for chemical spill is available with the chemical spill kit.	A chemical spill kit is evidenced and staff are trained irregularly and practiced in its use. There is no SOP for chemical spill available with the chemical spill kit.	A chemical spill kit is evidenced but staff are not trained and not practiced in its use. The SOP for chemical spill may be available with the chemical spill kit.	There is no chemical spill kit evidenced.			
71	**Emergency Response/ Exercises (fire drills, spill clean-up)**	A well-developed emergency plan and resources exist* for the laboratory, and include fire suppression systems, detectors, and evacuation plan; staff are trained and verified competent or are exercised regularly (e.g. at least annually).	An emergency plan and resources exist*, and include fire suppression systems, detectors, and evacuation plan; staff have been trained	An emergency plan and resources exist*, however there are significant gaps. Staff have been trained.	There is no emergency plans, or inconsistent fire prevention and emergency response measures exist in the laboratory.			
72	**Emergency procedures (shower)**	An emergency shower is available and functional in each department and is tested monthly to ensure its functionality.	An emergency shower is available and functional somewhere in the laboratory and may be tested monthly to ensure its functionality.	An emergency shower is available in some laboratories but with limitations (not regularly checked or not functional or only cold water etc.).	There is no emergency showers available or it is not functional despite the presence of chemical risks.			

73	**Biological spill kits availability**	A complete biological spill kit is located either immediately outside or within laboratory. There is a checklist that is checked monthly to ensure that all items are available. Staff are trained in its use at least annually.	A complete biological spill kit is located either immediately outside or within laboratory. There is a checklist, but it is not clear if it has ever been checked. Staff are trained (irregularly) in its use.	A biological spill kit is located either immediately outside or within laboratory. The spill kit is incomplete. There is no checklist . Staff are not trained in its use.	There is no biological spill kit.			
74	**Emergency Eyewash**	Emergency eye wash facilities are available in all laboratories; they are regularly checked to ensure they are flushed weekly (in the case of plumbed in eyewash) or in the case of bottle types are checked regularly to ensure that they have not expired; staff are trained in their operation.	Emergency eye wash facilities are available in all laboratories. They are not regularly checked to ensure they are flushed weekly (in the case of plumbed in eyewash) or in the case of bottle types are checked regularly to ensure that they have not expired. Staff may be trained in their operation.	Emergency eye wash facilities are available in some laboratories or departments. They are not regularly checked to ensure they are flushed weekly (in the case of plumbed in eyewash) or in the case of bottle types are checked regularly to ensure that they have not expired. Staff may be trained in their operation.	There are no emergency eye wash facilities.			
75	**Fire detection and suppression system**	An integrated fire detection and suppression system is installed in all laboratories; there is a thermal and smoke detection system; the fire detection system is checked regularly by local authorities to ensure that it is operational. A list of staff present is always available, and a meeting point(s) post-evacuation is/are defined	An integrated fire detection and suppression system is installed in all laboratories; there is a thermal and smoke detection system; but the fire detection system is not checked regularly by local authorities to ensure that it is operational. A meeting point post-evacuation is defined.	An integrated fire detection system is installed in SOME laboratories or departments but there is no automated suppression system; there is a thermal and smoke detection system; the fire detection system is not checked regularly by local authorities to ensure that it is operational. A meeting point post-evacuation is defined.	There is no integrated fire detection system nor automated suppression system installed.			
76	**Fire alarms and fire drills**	Fire alarms are installed and are regularly checked to ensure that they can be reliably heard by staff or are operational. The alarms are connected to emergency services. There are regular fire drills that are documented.	Fire alarms are installed but are not regularly checked to ensure that they can be reliably heard by staff or are operational. The alarms are not connected to emergency services. There are periodic fire drills that may be documented.	Fire alarms may be installed but are not regularly checked to ensure that they can be reliably heard by staff or are operational. The alarms are not connected to emergency services. There are no periodic fire drills.	Fire alarms are not installed. There are not regular fire drills.			
77	**Fire evacuation plan, fire exits**	Fire exits are clearly marked and there is a fire evacuation plan in every room. Corridors, aisles and circulation areas are clear and unobstructed for	Fire exits are marked but there is no fire evacuation plan. Corridors, aisles and circulation areas are clear and unobstructed for	Fire exits are not marked and there is no fire evacuation plan. Corridors, aisles and circulation areas are clear and unobstructed for movement of staff and fire-fighting equipment.	Fire exits are not marked and there is no fire evacuation plan. Corridors, aisles and circulation areas are not clear and can obstruct movement of staff and fire-fighting equipment.			

		movement of staff and fire-fighting equipment.	movement of staff and fire-fighting equipment.					
78	**Fire extinguishers**	The laboratory rooms with potential fire hazards* are equipped with appropriate extinguishers** and/or fire blankets for emergency. Portable fire extinguishers are maintained fully charged and in working order, and kept in designated places at all times. They are checked regularly (at least annually) to ensure they have sufficient pressure*** . All staff are properly trained on the use of fire extinguishers.	The laboratory rooms with potential fire hazards* are equipped with appropriate extinguishers** and/or fire blankets for emergency. Portable fire extinguishers are not maintained fully charged and in working order, and may be moved rather than remain in designated places at all times. They are checked regularly (at least annually) to ensure they have sufficient pressure***. All staff are properly trained on the use of fire extinguishers.	The laboratory rooms with potential fire hazards* are equipped with extinguishers and/or fire blankets for emergency. Portable fire extinguishers are not maintained fully charged and in working order. Staff are properly trained on the use of fire extinguishers.	The laboratory rooms with potential fire hazards* have neither extinguishers nor fire blankets for emergency.			
79	**Electrical equipment approval**	Prior to purchase of electrical equipment, the safety officer and/or engineering staff approves the purchase to ensure national compliance (national certification document, or CE) and that it will not exceed the current capacity of the laboratory electrical system.	Prior to purchase, the safety officer and/or engineering staff approves the purchase of electrical equipment to ensure national compliance (national certification document, or CE) but issues regarding the current capacity of the laboratory electrical system are not considered.	Staff are aware that electricity issues are a problem but electrical equipment is not approved prior to purchase (e.g. they do not know who to contact regarding approval as there is no formal system to do so).	Staff are not aware that electricity issues are a problem and electrical equipment is not approved prior to purchase			
80	**Electrical equipment testing**	Electrical equipment is regularly (annual) tested for safety using a portable appliance tester and a visual inspection, following an SOP. The results are documented.	Electrical equipment is regularly (annual) tested for safety by visual inspection using an SOP. The results are documented.	Electrical equipment is tested but only by visual inspection. SOP may be used. The results are inconstantly documented.	Electrical equipment is not tested.			

81	**Electrical earthing or grounding**	The interior wiring has an earthed/grounded conductor (i.e. a three-wire system). Each electric socket outlet is used for only one appliance (No overloaded outlets or electrical strips).	The interior wiring has an earthed/grounded conductor (i.e. a three-wire system). The sockets are slightly overloaded although not dangerously.	The interior wiring has an earthed/grounded conductor (i.e. a three-wire system) but much of the equipment appears not to be grounded (two wires only). The sockets are slightly overloaded although not dangerously.	Earthing or grounding is not apparent. The sockets are dangerously overloaded with the electrical equipment.			
82	**Response plan for power-failures**	Critical Biosafety equipment (i.e. BSCs) has an uninterruptible power supply/back-up generator. Staff are regularly trained and verified competent on failure of non-essential power supplies. The power generator is tested regularly (e.g., monthly).	Critical Biosafety equipment (i.e. BSCs) has an uninterruptible power supply/back-up generator. Staff are irregularly trained and not verified competent on failure of non-essential power supplies.	A response plan is available for power-failures involving critical Biosafety equipment (e.g. Biosafety cabinets) and staff are irregularly trained or verified as competent for response to power-failures involving critical Biosafety equipment (e.g. Biosafety cabinets).	A response plan for power-failures involving critical Biosafety equipment (e.g. Biosafety cabinets) is not available or is available but staff are not trained.			
83	**BSC testing**	Biosafety cabinets are tested (under recognized standard NSF49 or EN12469) and validated annually by NSF or EN certified assessors. HEPA filters are replaced in a timely manner following detection of leak test and back pressure failures. Repairs and adjustments to BSCs are performed in a timely manner following failure to meet manufacturers and /or national standards.	Biosafety cabinets are tested (under recognized standard NSF49 or EN12469) at least every 2 years by NSF certified assessors. HEPA filters are replaced following detection of leak test and back pressure failures. Repairs and adjustments to BSCs are performed following failure to meet manufacturers and /or national standards.	Biosafety cabinets are tested (under recognized standard NSF49 or EN12469) at least every 2 years by NSF certified assessors but insufficient corrective measures are taken.	Biosafety cabinets have not been tested (NSF49 or EN12469) by NSF certified assessors for 5 years or more.			
84	**BSC Use**	The biosafety cabinets are maintained and used appropriately by trained staff. They are located in room such as to minimize disruption in BSC airflow. They are uncluttered, vents not blocked, surfaces are clean and they are decontaminated after each use; there is a schedule and protocol for thorough cleaning/disinfecting (under the pan, above/behind the unit, etc).	The biosafety cabinets are used by trained and competent staff; they are located in rooms such as to minimize disruption in BSC airflow. They are uncluttered; vents are not blocked by materials or papers; there is a consistent surface cleaning and disinfection practiced; but here is no schedule or protocol for thorough cleaning.	Biosafety cabinets are used by minimally trained staff; their location in the room allows routine disruption of BSC airflow; there is some clutter in the cabinet and/or near the vents that may interfere with air flow; There is inconsistent cleaning and disinfection practiced.	Biosafety cabinets are not maintained or appropriately used, e.g. they are placed where fans/doors/staff movement routinely disrupts airflow; they are cluttered; the vents are blocked; they are not routinely cleaned or disinfected. There is no training or SOPs for BSC use.			

85	**BSC conformity**	100% biosafety cabinets are in conformity with internationally recognized standards (NSF49 or EN12469) and are properly placed in the laboratory premises. All tasks that require usage of BSC are done in the appropriate BSC.	100% biosafety cabinets are in conformity with internationally recognized standards (NSF49 or EN12469)but 5-10% are not properly placed in the laboratory premises. All tasks that require usage of BSC are done in the appropriate BSC.	100% biosafety cabinets are in conformity with internationally recognized standards (NSF49 or EN12469) but more than 10% are not properly placed in the laboratory premises. Only certain tasks that require usage of BSC are done in the appropriate BSC.	Some biosafety cabinets are not in conformity with internationally recognized standards (NSF49 or EN12469), and/or more than 10% are not properly placed in the laboratory premises.			
86	**Risk assessment for PPE requirement**	Specific PPE requirements are determined by laboratory risk assessment for each pathogenic agent and/or procedures and are included in technical SOPs on laboratory PPE (or with PPE requirements).	The PPE required for working with specific pathogenic agents and/or procedures are included in laboratory SOPs.	The laboratory has a basic minimal PPE requirement for working in the laboratory.	The laboratory has no minimal PPE requirement for working in the lab, and the PPE to be worn is determined by the individual staff.			
87	**Risk assessment for glove selection**	The glove selection is based on an appropriate risk assessment of intended use (e.g. chemicals, toxins, infectious agents, temperature, and contact time).	The glove selection is generally based on intended use (e.g. chemicals, toxins, infectious agents, temperature, and contact time).	Disposable gloves are generically used with infectious agents and potential toxins, non-disposable gloves are available for dishwashing, autoclaves, and similar hand protection needs.	Gloves are not always available, there is no laboratory policy on how or when to use them.			
88	**Availability of PPE**	All appropriate PPE are provided without cost for staff use and are individually fit-tested (where applicable). Staff are trained and competent in PPE don and doff procedures.	All appropriate PPE including respiratory protection (disposable, reusable) are consistently available and provided without cost to all staff. Staff are trained and competent in PPE don and doff procedures.	Basic reusable and disposable PPE are made consistently available and available to all staff (e.g. laboratory coats, gloves, face masks, safety glasses). Staff are trained in PPE don and doff procedures.	Basic or reusable PPE are not consistently available or not available to all staff. Staff may have to provide their own reusable PPE (e.g. lab coats, glasses).			
89	**PPE Training**	All technical and animal handling staff are trained at the time of hire and regularly, and verified as competent at least annually in the correct use and removal of PPE.	Staff are trained at the time of hire and verified as competent in the correct use and removal of PPE.	Technical and animal handling staff receive an initial training on the correct use and removal of PPE.	There is no training for the correct use or removal of PPE.			
90	**PPE usage and removal**	Laboratory PPE (e.g. coats, gowns, coveralls, aprons, boots) are removed and stored or discarded in designated areas whenever leaving the work area of the laboratory.	Laboratory PPE (e.g. coats, gowns, coveralls, aprons, boots) are not worn outside the work area of the laboratory.	Laboratory PPE (e.g. coats, gowns, coveralls, aprons, boots) are worn throughout the facility (e.g. work areas, hallways, offices).	Laboratory PPE (e.g. coats, gowns, coveralls, aprons, boots) may be worn after leaving the laboratory.			

91	**PPE (protective eyewear or face protection)**	Protective eyewear (or full face protection) is required and available for staff who wear contact lenses and for all staff when procedures used have the potential to generate splashes.	Protective eyewear (or full face protection) is required and available for all staff when procedures used have the potential to generate splashes.	There is no specific requirement for protective eyewear or full face protection (but they are available) for staff to use for procedures with the potential to generate splashes.	The laboratory does not require and does not provide protective eyewear or face protection for staff.			
92	**Common objects handling in the work area**	Within the work area gloves are removed and hands are washed before touching common objects (e.g. doorknobs, phones, keyboards).	Within the work area gloves are removed before touching common objects (e.g. doorknobs, phones, keyboards), but hands are not always washed.	Within the work area common objects (e.g. doorknobs, phones, keyboards) are sometimes touched with gloved hands.	Within the work area common objects (e.g. doorknobs, phones, keyboards) are commonly touched with gloved hands.			
93	**Use of PPE when working with temperature extremes**	Protective gloves and face shields are required when working with temperature extremes (hot/cold) including ultralow temperatures (e.g. -80C storage, liquid nitrogen, dry ice, liquefied gases).	Protective gloves are required and face shields are available for working with temperature extremes (hot/cold) including ultralow temperatures (e.g. -80C storage, liquid nitrogen, dry ice, liquefied gases).	Protective gloves are required for working with temperature extremes (hot/cold) including ultralow temperatures (e.g. -80C storage, liquid nitrogen, dry ice, liquefied gases).	There is no required PPE for working with temperature extremes (hot/cold) including ultralow temperatures (e.g. -80C storage, liquid nitrogen, dry ice, liquefied gases).			
94	**Reusable PPE maintenance programme**	The laboratory has a specific maintenance program for reusable PPE (e.g. required cleaning, inspection before use, and required replacement before or at initial signs of degradation)	Reusable PPE are kept clean but may show signs of wear (showing initial signs of degradation) before being replaced.	Reusable PPE are not always kept clean and are replaced only when well worn (showing clear signs of degradation).	The laboratory has no specific requirements for care or replacement of reusable PPE, Reusable PPE are not kept clean.			
95	**Reusable PPE cleaning procedures**	Clear laboratory policies and procedures define cleaning and disinfection of reusable PPE*.	Inconsistent laboratory policies and procedures define cleaning and disinfection of reusable PPE*.	The procedures for cleaning or disinfection of reusable PPE* are Inappropriate**.	Cleaning of reusable PPE are not performed.			
96	**Laundry practices**	Protective clothing (e.g. laboratory coats, uniforms, gowns, coveralls, scrubs) are decontaminated (when applicable*) prior to being laundered after each use. Sufficient clean replacements are available at all times.	Protective clothing (e.g. laboratory coats, uniforms, gowns, coveralls, scrubs) are decontaminated (when applicable*) prior to being laundered and are laundered by the laboratory on a regular schedule. Sufficient clean replacements are available at all times.	Protective clothing (e.g. laboratory coats, uniforms, gowns, coveralls, scrubs) are laundered by (in) the laboratory when time permits or as needed; Sufficient clean replacements are not available at all time.	Protective clothing (e.g. laboratory coats, uniforms, gowns, coveralls, scrubs, etc) are rarely laundered by (in) the laboratory, or are laundered at home by staff as needed.			

97	**Disposable gloves usage**	Disposable gloves (and double gloves when appropriate) are worn per chemical/pathogenic agent-specific or procedural SOP, are inspected frequently for contamination or loss of integrity, and are not reused.	Disposable gloves are worn whenever working with potentially toxic or infectious materials and biologicals, are changed frequently during a work shift, and are not reused.	Gloves are required whenever handling potentially toxic/ infectious materials and biologicals. Disposable gloves may be worn for all or most of a work shift and are not reused.	Gloves are generally worn when working with toxic/infectious materials; disposable gloves may be washed and reused.			
98	**Decontamination (disposal) of non-reusable PPE**	Non-reusable PPE are treated after use (e.g. decontaminated, autoclaved) and disposed of per contamination risk (e.g. Hazardous [chemical waste], biohazardous [infectious waste], and regular trash).	Non-reusable PPE are used and disposed of per contamination risk (e.g. Hazardous [chemical waste], biohazardous [infectious waste], regular trash), but are not treated after use (e.g. decontaminated, autoclaved).	Non-reusable PPE are used and disposed of as biohazardous laboratory waste but are not treated before disposal (autoclaved or decontaminated).	Non-reusable PPE are not treated before disposal (autoclaved or decontaminated).			

The tool can be obtained on request from the FAO EMPRES Laboratory Unit.