	6. Laboratory Safety			
	Basic	Developing	Advanced	Leading Edge
Strategic Direction	1 2 3 The NPHI recognizes the importance of lab safety but has not prioritized it.	4 5 6 The NPHI has begun to prioritize lab safety and includes it in funding requests.	7 8 9 The NPHI considers lab safety a high priority. Lab managers and staff understand their responsibilities for ensuring health and safety.	Lab safety is a high priority for the NPHI. The NPHI demonstrates this by incorporating lab safety into all relevant planning efforts and committing substantial resources to this issue.
Systems	The lab has few safety guidelines, and those that exist are not implemented systematically. Reporting procedures for lab hazards, injuries, or exposures have not been formalized, although reports to leaders/managers are made when medical attention is needed.	The NPHI's health and safety guidelines and standards cover many areas, but they are difficult for staff to access and are not followed consistently. Reporting procedures for hazards, injuries, and exposures are in place but are not widely shared and are often not followed.	The NPHI has established formal health and safety guidelines and SOPs, which are easily accessible to staff. Systems are in place for routine checks for potential equipment malfunctions and other hazards. Staff usually are diligent about reporting hazards, injuries, or exposures.	The NPHI ensures compliance with guidelines, SOPs, and other approaches to ensuring safety. The NPHI emphasizes systems that rely on engineering and design measures rather than human behavior. When hazards, injuries, or exposures occur, the NPHI investigates rapidly to identify potential prevention measures.
Resources	Buildings are run-down, with some labs in unsuitable spaces. Equipment safety is rarely assessed, and when problems are found, they are not fixed because of a lack of parts or skilled technicians. Personal protective equipment (PPE) is inconsistently available.	Some buildings have structural problems that may pose hazards. Equipment often malfunctions, sometimes making it dangerous. PPE is often lacking. As new projects are started, efforts are made to include maintenance contracts with equipment purchases and to budget for PPE.	The NPHI's lab facilities are appropriate to the work being conducted. Lab equipment is in good working order and adequate PPE is readily available.	The NPHI's labs use state-of-the-art design to minimize the potential for risks to workers and ensure worker comfort. Dangerous activities are automated when possible, reducing the opportunity for injuries or exposure to hazards.
Quality	The NPHI does not conduct training, and many staff have not been trained to do their specific jobs. The NPHI's labs often lack critical equipment or have equipment that does not work, leading staff to do workarounds that may be unsafe, for example, working without a hood. Ergonomics receives almost no attention. Injuries and exposures to chemicals or organisms occur regularly, but only the most serious are reported.	Some parts of the NPHI are working to meet external management and quality standards. The NPHI offers some training on lab safety, mostly supported by donors. Ergonomics-related problems are concerning, but little action is taken. Rules for reporting safety-related events are unclear, and under-reporting remains an issue.	Most NPHI labs aim to meet external management and quality standards, including accreditation. Lab staff regularly receive safety training. The NPHI has reduced ergonomics-related issues, and injuries and harmful exposures are rare. Rules for reporting events are clear, and they are generally followed. Risks are assessed regularly, and the findings are often used to implement new safety measures.	NPHI labs almost always meet external management and quality standards. Injuries and exposures in the lab are very rare, and efforts are made to minimize ergonomic issues. The NPHI prioritizes engineering and other approaches to reduce reliance on human behavior to keep workers safe. The NPHI emphasizes proactively identifying and reducing potential hazards and solutions.
Engagement	Staff are often concerned about their health and safety on the job and feel that the NPHI is not taking adequate steps to protect them.	In some NPHI labs, staff are seeing improvements in lab conditions. However, unsafe conditions persist in others, and staff feel that leaders/managers do not take their concerns seriously.	Staff often proactively identify potential risks and suggest solutions. Leadership and staff share a commitment to safety and to work together to resolve issues.	Staff and leadership work together to ensure labs are safe, healthy places to work. Staff are encouraged to think broadly about how to improve lab safety, productivity, and wellbeing of workers, through changes in lab design, workflow, equipment, etc.
Impact	Unsafe conditions persist for extended periods and impact the health and safety of NPHI staff and their ability to be productive. Some staff have become sick or injured on the job.	More of the NPHI's labs are meeting accepted standards for safety. Injuries or exposures requiring medical attention occasionally occur. However, concerns about health and safety continue to impact morale and productivity.	The NPHI is working to create safe labs, and injuries or harmful exposures are rare. The NPHI's lab workers feel cared for. They are making critical contributions to the country's health.	The NPHI's lab safety program is a model for others. The design of its labs and systems, engagement of workers, and commitment to continuous improvement result in an outstanding safety record, high job satisfaction, and productivity.