

360°
DIAGNOSTICS
prevention through resolution


charles river

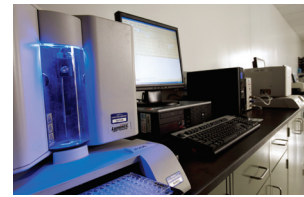
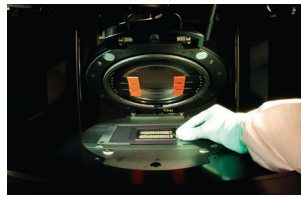


360 Diagnostics™ Program

In today's challenging research environment, vast resources are allocated to ensure that investigators have the necessary tools to meet their study goals. For over 30 years, Charles River has helped maintain research integrity by providing the most comprehensive portfolio of solutions for monitoring the health of study animals.

The Charles River 360 Diagnostics™ program builds on a foundation of contamination prevention measures, effective pathogen detection, and scientific and technical proficiency to help vivarium managers design and maintain a clean and secure facility. By combining industry-leading veterinary expertise with innovative pathogen testing methodologies, the 360 Diagnostics™ program ensures not only access to the industry's best technologies but also the know-how required for successful application.

360 Diagnostics™ is more than just a testing solution: it transforms your biosecurity program from a maintenance plan to a valuable disaster-planning tool. By taking a 360 look at your program, we work with you to identify and proactively address weaknesses and gaps that could leave your facility vulnerable to contamination.



Prevention: Laboratory animal facility, biosecurity and QC program designed to protect your research investment

Identification: Leading-edge tools to continually monitor the health of your facility as well as identify potential risks to it

Resolution: Measures to recover your valuable research in the event of a breach in your biosecurity

Prevention.

Smart facility design, thoughtful work processes and a robust health surveillance program are key to successfully controlling and eliminating health variables that have the potential to impact research studies.

Because health concerns vary greatly with facility size and research type, our belief is that prevention starts at the beginning. Whether you're building a facility from the ground up or assessing an existing health monitoring program, our staff of veterinarians, PhD-level scientists and facility design specialists can help you identify risks, provide recommendations and develop a customized biosecurity program. Following an on-site assessment of your facility, our field experts work with you to develop and implement a QC program that fits your budget and your specific research needs.

Facility Design Consultation: Decades of combined experience in designing, commissioning or decommissioning a research facility, vivarium or laboratory space

Equipment Management Services: Equipment management and testing to minimize the risk of contamination

Program Assessment: The first step in identifying and fixing gaps in your biosecurity programs; in addition to screening animals, environmental monitoring and research biologics screening may be incorporated

Custom Training and Education: Training modules customized to meet your program's specific needs





Our skilled veterinary, scientific and technical experts help you take preventative measures by uncovering potential gaps and identifying risk.

Identification.

Effective pathogen detection is best achieved through the use of multiple testing modalities at various levels within a research animal facility.

Laboratory animal breeders and users have made a concerted effort to use facilities and procedures that prevent adventitious infections. However, despite these efforts, there is always the risk of a contamination. Our goal is to identify and incorporate the most analytically precise technologies in order to provide the most accurate and reproducible results. Our laboratory is driven by an internal research and development team, made up of laboratory animal scientists that work on broadening the scope of our services, increasing the sensitivity and specificity of our assays and developing novel testing techniques. Our 3Rs-focused R&D program has spurred new monitoring methods that allow you to utilize antemortem and cage-level sampling. These specialists are also available to collaborate with clients to refine their internal assays.

Serology: Antibody detection on the Multiplexed Fluorometric ImmunoAssay® (MFIA®) platform

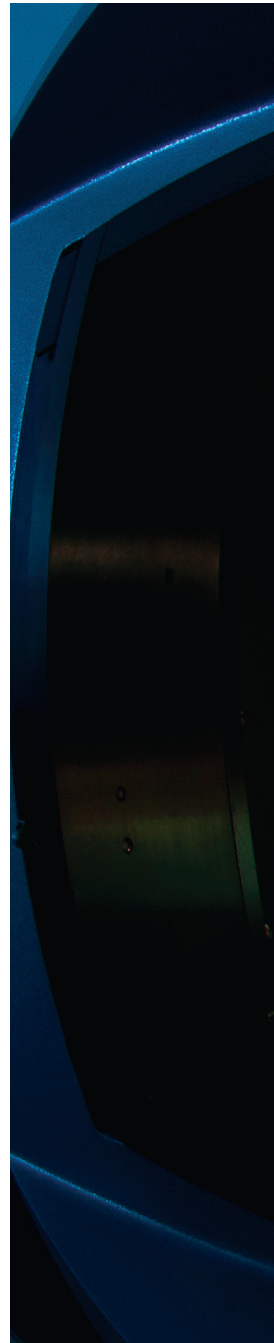
PCR: Direct detection of infectious agents in animal colonies; includes PCR Rodent Infectious Agent (PRIA) panels

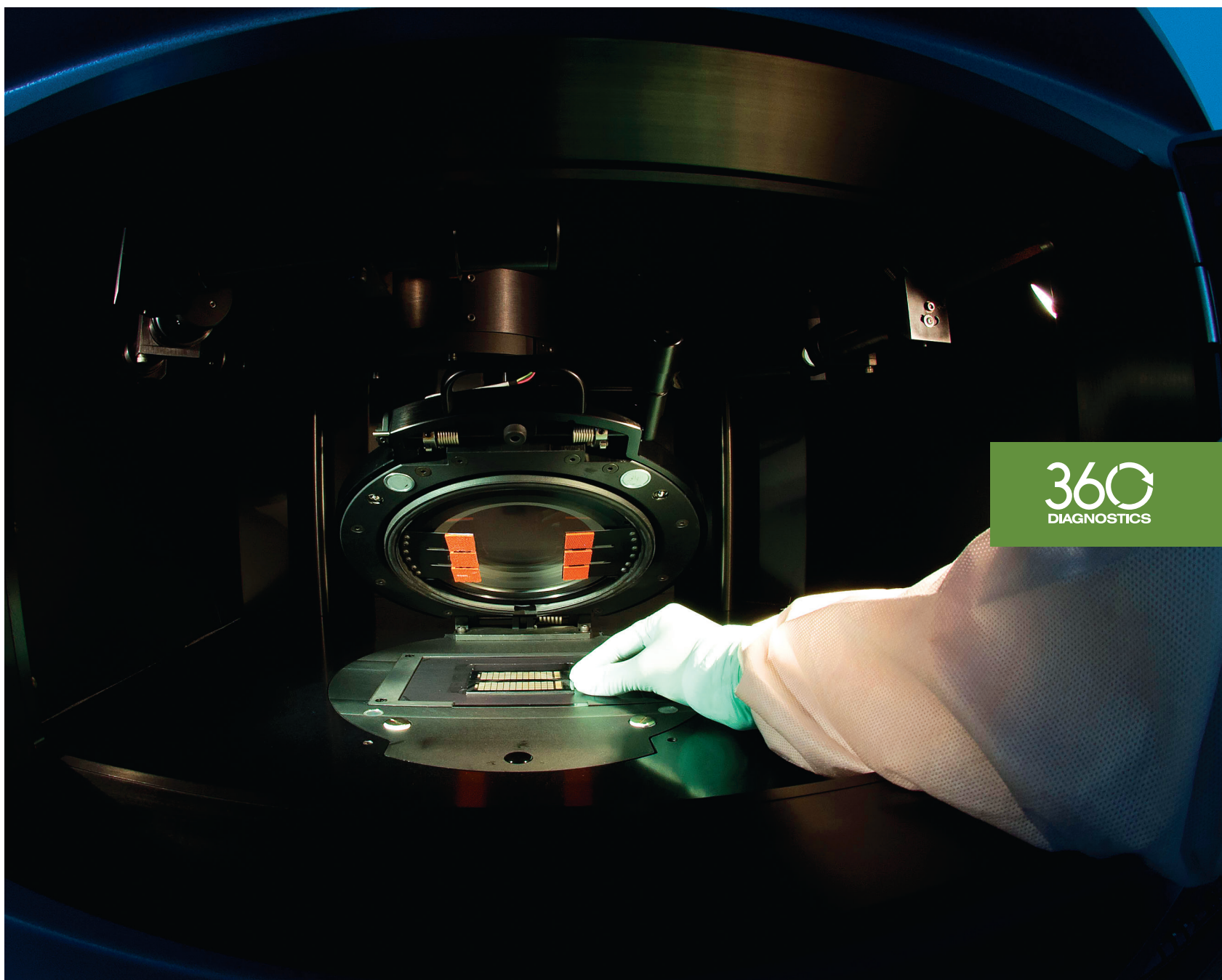
Environmental Monitoring: Microbiology and PCR methodologies to identify infectious agents within a laboratory animal facility

Diagnostic Troubleshooting: Services designed to identify potential causes of unexpected study animal mortalities

QC Program Onboarding: Implementation, training and free sample collection and shipping materials

Biologics Screening: Identification of contaminants in biologics or cell lines utilized in research





360
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Charles River 360 Diagnostics utilizes high-density real-time PCR to perform quarantine testing, routine pathogen screening of colony animals and evaluation of research biologics.

Resolution.

If contamination finds its way into your facility, Charles River will help you find a path forward that will minimize disruption, cost and loss of research during resolution.

By the time any organism is detected, it has been resident for many days and usually weeks or months. We work with you to define and establish a perimeter around the affected area and determine whether material, animals, equipment or personnel have been involved in further contamination. If disinfection of the room and equipment is required, we leverage our familiarity with your facility's layout, operations and equipment to analyze each research activity for risk and control or halt as needed. With information-tracking practices and disaster-planning measures built into your customized biosecurity program, we are prepared to help you identify the source of the contamination while lessening the impact of the outbreak.

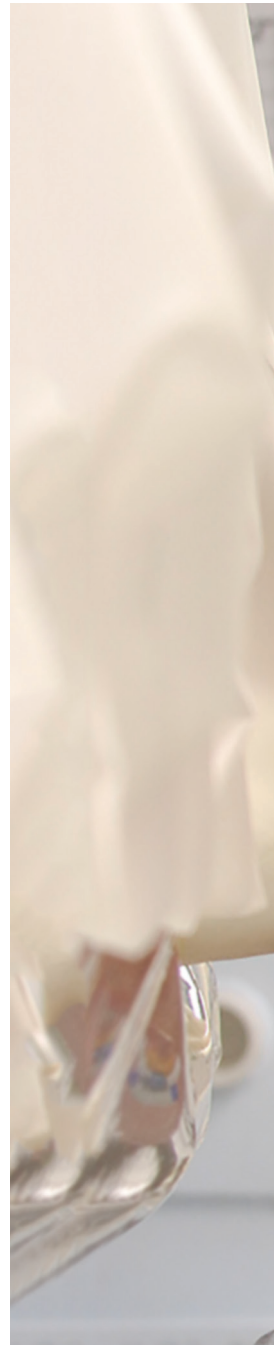
Confirm: Use of multiple testing methods to confirm outbreak.

Assess: A testing plan to identify scope of contamination within the facility and to limit spread

Recover: A remediation and clean-up plan, which may include colony rederivation or recovery services

Resume: Consultation on decontamination and recommissioning of rooms/facilities

Prevent: Investigation of potential sources of contamination





Our team of scientists and animal care staff offer guidance, develop work plans and help you overcome challenges associated with a contamination.

Data Management.

Streamline your efforts by utilizing Laboratory Testing Management (LTM™) to effectively manage your biosecurity program, maintain research timelines and make go/no-go decisions with real-time data.

Our online data management platform, Laboratory Testing Management (LTM™), centralizes your health surveillance, biomarker and genetic testing programs in one virtual location. LTM™ provides a simplified approach to building a customized test plan. Once your program is underway, you are able to manage it through a browser-based homepage dashboard. LTM™ automatically sends an alert upon a first-time positive finding, and you can customize your preferences to be contacted via email, text message or mobile app notification when other status updates have been made.

Filter our catalog by keyword, species or test type to find exactly what you need

Browse test details, including assays, targets, methods and submission instructions

Access up-to-the-minute result information on-the-go using LTM™ Mobile

Add testing solutions to an online shopping cart

Get instructions for submitting samples

Schedule a test using our online order wizard

Search your order history and export data to Microsoft® Excel® using the LTM™ Analytics tool

Summarize your colony health data by building, rack or species





With LTM™, you can manage and review orders, keep tabs on your order status, receive instant alerts, create customized summary reports and analyze historical data.



Critical Control Points

PREVENTION	People	Arthropods and Wild Animals	Research Animals	Research Biologics	Feed and Bedding	Water	Caging and Equipment	Dust and Droplets	Common or Shared Spaces
Health Monitoring and QC Program Assessment	•	•	•	•	•	•	•	•	•
Health Monitoring and QC Program Implementation	•	•	•	•	•	•	•	•	•
Vivarium Design	•	•	•	•	•	•	•	•	•
Equipment Management							•		•
IDENTIFICATION									
Biologics Screening				•					
Environmental Monitoring		•			•	•	•	•	•
Animal Health Surveillance		•	•	•	•		•	•	•
RESOLUTION									
Recovery Services			•				•		
Disaster Preparedness	•	•	•	•	•	•	•	•	•
Remediation Services	•	•	•	•	•	•	•	•	•

Custom training for Prevention, Identification and Resolution programs is available.