

# Alternative Health Monitoring Open-Top Rack Systems

Open-top cages are absent of a filter top and are placed directly onto a rack or shelf. There is no barrier or protection between the interior of the cage and the room environment; therefore, this type of caging poses a higher biosecurity risk as compared to IVCs.

## Program Overview

Sampling of surfaces in rooms that contain open-top cages have been shown to work as efficiently as plenum or filter testing of IVC racks. Testing areas of dust concentration is best for detecting infectious agents, so factors such as a room's airflow pattern must be taken into account when determining optimal sampling sites. Our experts can help determine if your rack system can accommodate a sentinel-free monitoring program and advise on the optimal sampling sites. Example programs are outlined below.

Program Type	Annual Frequency			
	Month 3	Month 6	Month 9	Month 12
Sentinel-free - Rack Level Monitoring	EM	EM	EM	EM
Hybrid - Rack Level Monitoring	EM	S	EM	S

EM= Environmental monitoring (via PCR testing) of the room exhaust vents and rack surface swabs\*

S= Sentinel monitoring via traditional methods (i.e., serology, PCR, whole animal screening) performed on either resident (immunocompetent only) or sentinel animals

\*Non-invasive fecal samples can be collected from resident or sentinel rodents and pooled with EM samples.

## Program Development

Not all laboratory animal facilities are the same and, quite often, require health monitoring (HM) programs that are specifically designed around an institution's infectious agent exclusion list, study protocols or type of research animals being utilized. Charles River 360 Diagnostics™ experts will work directly with you to develop a customized HM program that meets your budgetary and surveillance requirements. Program development can include:

- consultation to assess biosecurity risk
- preventative training and education
- step-by-step assessment of current HM processes
- facility design consultation

**To request a consultation, please go to [www.criver.com/360consultation](http://www.criver.com/360consultation).**