

# From Crab to Cartridge



1 Horseshoe crabs are collected by fishermen in the spring and taken to the Charleston, SC bleeding facility.



2 At the facility, crabs are cleaned, inspected and prepped for bleeding.



3 About 25% of the crab's blood is removed in the collection of their blood cells, or amebocytes, which are similar to human platelets.



4 The crabs are quickly returned to their native waters within 24 hours. The survival rate is >95%.



5 The amebocytes are prepared and treated to Charles River's proprietary formulation process to yield Limulus Amebocyte Lysate or LAL.



6 The LAL is tested and analyzed for performance characteristics according to our FDA license.



7 The finished LAL product is applied to polystyrene cartridges along with other reagents required for the test.



8 The self-contained cartridges are tested and measured for conformance to FDA requirements.



9 The final product, a 4 channel disposable cartridge, contains all the ingredients to run an LAL assay and utilizes  $\frac{1}{20}$ th of the amebocytes required for traditional LAL assays.