Objectives and Outcomes of US Pork Industry Rapid Response Teams

Rapid Response Teams
The purpose of Rapid Response Teams is to facilitate and support experts and appropriate state and federal animal health officials to be able to provide the pork industry information needed to respond in cases of high or ongoing morbidity or mortality without an identified etiology and in cases of emerging swine diseases of known etiology. When activated, the Rapid Response Team goal will be to be on the site within 72 hours, assuming a foreign animal disease investigation, if done, is negative and closed.

The veterinarian of record for the site and person responsible for managing the site’s production will represent the producer during the investigation. Team members will be identified with cooperation and input from the veterinarian of record for the site. Members of the Team could include the:

- VDL diagnostician of the case or a representative
- A veterinarian consultant
- University veterinary Extension and/or Subject Matter Expert(s) inside or outside the geographical area of the site
- State or federal veterinary epidemiologists, subject to the permission of the participating producer
- In addition, a “situation defined” person may be appropriate. This is someone that may be able to help the team with communications or relationships in niche or other production.

People with the needed expertise and willingness to participate on Rapid Response Teams in states or regions of the country will be identified. SHIC will offer options to the producer for members of the Rapid Response Team and arrange funding to support them and their work. Usual expenses associated with travel for the Team members and appropriate consultation fees will be paid. The Rapid Response Team will be responsible for gathering any follow-up information needed and the Rapid Response Team will write a report of the investigation including their recommendations for follow up, if any.

In specific situations team members may include members from outside the geographical area and specific travel arrangements will need to be made in that case. The Rapid Response Teams will use consistent investigation forms and questionnaires, as needed, to gather information. They will be trained to ensure consistency and efficiency, follow farm or industry biosecurity and biocontainment procedures and minimize their time on the site.

Emerging swine disease of known etiology
These investigations will take place only in response to epidemiologically distinct outbreaks. SHIC’s objective for a rapid response in the event of an emerging swine disease of known etiology is to facilitate the systematic collection of epidemiological information needed to identify the index case(s), identify the possible pathways of introduction of the pathogen on the farm and other characteristics of the outbreak. The outcome of the rapid response will be information provided to the pork industry to help strengthen individual producers’ ability to respond on the farm and to the industry’s more general emerging disease response plan to help strengthen its ability to recommend appropriate industry responses.

Within 24 hours of the request for help, coordination of an investigation will begin with communication among the producer or a representative, the veterinarian of record for the farm, the diagnostician in the veterinary diagnostic lab assigned to the case, the state animal health official or a representative or the veterinary staff of the Swine Health Information Center, the American Association of Swine Veterinarians, the National Pork Board and the National Pork Producers Council. This communication will:

- define confidentiality needs and communication pathways,
• gather initial information about the case,
• inform state animal health officials for a determination if a foreign animal disease investigation is appropriate,
• inform participants about the resources available and
• define if or what next steps need to be taken.

When activated, a Rapid Response Team will be available to be on the site within 72 hours. The total time to reach the overall objective of these investigations may vary as individual farm investigations will give some information but it may take a body of them to be able to have enough information to confidently communicate the results.

**Swine morbidity/mortality events of unknown etiology**

There are incidents of high or ongoing morbidity or high mortality where an etiology is either not identified or there is a strong suspicion that the identified etiology is not the likely cause of the outbreak. In these cases, additional investigation and/or support for the fees of further diagnostic workup may help to identify newly introduced or emerging swine diseases.

SHIC’s objective for a rapid response to these incidents is to provide resources to identify the likely etiology and facilitate an investigation, if requested and appropriate. These two activities could be done together or independently, depending on the request received.

The outcome of the investigations will be information provided to the pork industry to help strengthen individual producers’ ability to respond on the farm and to the industry’s more general emerging disease response plan to help strengthen its ability to recommend appropriate industry-wide responses.

To start the diagnostic fee support process, the diagnostician associated with the case should fill out and submit the SHIC Diagnostician Form and ask the submitter to complete the Submitter Permission Form for the case file. The diagnostician of the case must be from a recognized public, accredited veterinary diagnostic laboratory. A SHIC Diagnostician Panel will review the application and respond within 48 hours.

If approved, SHIC will provide an expert review of the diagnostic workup and possibly fees for further diagnostic testing. The diagnostician for the case is responsible for requesting these resources after securing permission of the case’s submitter and through submitting information to a panel of diagnosticians for their review and recommendations.

This assistance will be offered under the following conditions.

1. The case involves high or ongoing morbidity or mortality.
2. Routine diagnostics matching the clinical presentation have been completed.
   a. A panel of diagnosticians has reviewed the case
      i. The panel concurs that the likely differential diagnoses have been addressed.
      ii. The panel offers help if the diagnostician of the case requests it.
3. Results are unsatisfactory due to either the veterinarian’s clinical judgment or the lack of an identified etiology.
4. The SAHO of the premises’ state has been notified of the case and the lack of a satisfactory diagnosis.
   a. A foreign animal disease investigation has been considered by the SAHO or federal animal health officials and initiated, if appropriate.
Following identification of the likely etiology of the outbreak, a Rapid Response Team investigation could be initiated, if requested by the producer and veterinarian of record.

**Timeline for rapid response to newly introduced or emerging swine diseases**

In cases without an identified etiology, requests for a Rapid Response Team or diagnostic fee support can be considered either together or separately. Times shown are maximum goals. If possible, actual time may be shorter.

**Rapid Response Team (RRT) in response to cases of known etiology**

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Request for RRT to SHIC

Coordination call to activate RRT

0 hr

24 hr

48 hr

72 hr

96 hr

RRT on site

SHIC Diagnostician Panel contacts the diagnostician

Request for diagnostic support from Diagnostician
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**Diagnostic review and fee support in response to cases of unknown etiology**