




## Section 5.3

# Risk Management of Broken Needles

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### REFERENCED IN THIS SECTION:

Number/ Identifier	Name	Importance
 <b>STANDARD OPERATING PROCEDURE</b>		
5.3	Risk Management of Broken Needles	Mandatory
 <b>RECORD</b>		
R-1	Verification Record	
R-B	Training Record	Mandatory
R-G	Swine Movement Document	
R-T	Treatment Record	
R-2	Incident Report	Mandatory, if applicable
R-3	Corrective Action Request	
R-U	Emergency Contact List	Highly recommended
 <b>FACT SHEET</b>		
F-5	Needle Usage and Selection of Injection Site	–

## SECTION 5.3

# RISK MANAGEMENT OF BROKEN NEEDLES

### REQUIREMENTS

1. All broken needles must be recorded on the Treatment Record (R-T).
2. A Risk Management of Broken Needles SOP (SOP 5.3) must be developed and include all of the following:
  - a. the protocol
  - b. the deviation measures (what to do if something goes wrong), and
  - c. the verification measures.
3. The Risk Management of Broken Needles SOP (SOP 5.3) must be adequately implemented.

*For your convenience, template for the Risk Management of Broken Needles SOP (SOP 5.3) and the Treatment Record (R-T) listed above have been developed for you to use.*

### RATIONALE

- a. A Risk Management of Broken Needles (SOP 5.3) reduces the risk of needle fragments in the meat being found by the processing plant or in the marketplace.
- b. "Detectable" needles are used because they are constructed of metal that can be detected by metal detectors at processing plants.
- c. Appropriate injection techniques reduce the risk of broken needles and abscesses at the injection site.
- d. When a needle is lost in a pen, it is crucial that it be found and removed to ensure pigs do not injure themselves on it or eat it, which could cause a food-safety issue.

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### GUIDANCE

- a. The appropriate use of injection and pig-restraint techniques, frequent changing of needles and the immediate identification and disposal of bent needles are all good production practices to avoid needle breakage.
- b. It is recommended that needles be changed after injecting 10 to 20 pigs.
- c. Examples of permanent identifiers are: broken needle ear tags or other colored ear tags placed in the pigs' ear on the same side where the needle was broken, or with a distinctive tattoo.
- d. If a broken needle fragment remain in a pig and that pig **can be identified**, it is recommended that if it is a:
  - i. *nursing or nursery pig*, it should be euthanized on site;
  - ii. *market hog*, it should **not** be sold (e.g., abattoir or assembly yard). The animal may be slaughtered and the meat retained only for personal use. The meat must not be sold.
- e. If a broken needle fragment remain in a pig and that pig **cannot be identified** as it has mixed with others in the pen, it is recommended that:
  - i. producers contact their abattoir and/or the provincial program coordinator to discuss options to manage all of the animals in the implicated pen.
  - ii. when evaluating options, it is critical that the risk to consumers of finding a needle in their pork be addressed.
- f. Many processing plants do not want to receive any pigs that have, or may have, a broken needle fragment in them. Work with your plant to determine how they want you to handle such pigs.
- g. It is recommended that a bio-medical waste container be used to dispose of all used needles. This container, when full, needs to be taken to a waste management center that accepts them for biosecure disposal. If a needle is lost and not retrieved in a pen it may be eaten by a pig and found embedded in the tongue at the slaughterhouse.
- h. It is recommended that an emergency contact list be kept up to date and made available to all employees.
- i. For additional information on needles and injections, see the Needle Usage and Selection of Injection Site fact sheet.

## AUDIT QUESTIONS

Q#	Audit Questions and Interpretations	Verification				
		Compliant	NC-Minor	NC-Major	NC-Critical	N/A
Q5.3.1	Verify that pigs that have (or are suspected to have) a broken needle fragment are recorded on the Treatment Record, when applicable.	<b>Full and Partial Validation:</b> > R-T: Treatment Record > interview				
	Are pigs that have (or are suspected to have) broken needle fragments and have not been euthanized recorded on a Treatment Record?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q5.3.2	Verify that the Risk Management of Broken Needles SOP (SOP 5.3) includes all required elements: a. the protocol b. the deviation measures describing what to do if something goes wrong, and c. the verification measures. All required elements are listed on SOP 5.3 Risk Management of Broken Needles.	<b>Full and Partial Validation:</b> > SOP 5.3: Risk Management of Broken Needles				
	Does the site have a Risk Management of Broken Needles SOP (SOP 5.3) that includes:					
	a. the protocol with all PigSAFE-required elements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	b. the deviation measures describing what to do if something goes wrong?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	c. the verification measures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q5.3.3	Verify that the Risk Management of Broken Needles SOP (SOP 5.3) has been adequately implemented by ensuring it is clearly identified on the Treatment Record.	<b>Full and Partial Validation:</b> > R-B: Training Record > R-G: Swine Movement Document > R-M: Mortality Record > R-T: Treatment Record > R-1: Verification Record > R-2: Incident Report > R-3: Corrective Action Request > observation (full validation only) > interview				
	Is the Risk Management of Broken Needles SOP (SOP 5.3) adequately implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N/A = not applicable; SOP = standard operating procedure



## LEVELS OF COMPLIANCE – EXAMPLES

### COMPLIANT

- › The SOP is complete and adequately implemented.
- › The records are complete and up to date.

### MINOR NON-COMPLIANCE **Timeline: 60 days**

- › Some elements are not written down or are missing from the SOP or records.

### MAJOR NON-COMPLIANCE **Timeline: 30 days**

- › The SOP is not available.
- › The records are not available.
- › Some elements of the SOP have not been implemented.
- › Pigs that have (or are suspected to have) broken needle fragments were not euthanized immediately or not permanently identified and not recorded in the Treatment Record.

### CRITICAL NON-COMPLIANCE **Timeline: 24 hours**

- › The slaughterhouse found a broken needle fragment in the meat without receiving prior notice of this from the site manager (whether the pig was or was not identified).
- › The slaughterhouse notified the PigSAFE | PigCARE provincial coordinator about the fragment.