



# Office of Environmental Health Services

## *Guide to Employee Health in Food Establishments*

January, 2010

**VDH** VIRGINIA  
DEPARTMENT  
OF HEALTH  
*Protecting You and Your Environment*

The Office of Environmental Health Services has developed this *Guide to Employee Health in Food Establishments* to encourage practices and behaviors that can help prevent food employees from spreading viruses and bacteria to food. This guide provides easy-to-use decision trees and tables that food establishments and public health officials can use when training staff or addressing employee health issues. This information is taken from the provisions listed in the Virginia Food Regulations, 12 VAC 5-421, and effective January 1, 2010.

The Centers for Disease Control and Prevention (CDC) and Food and Drug Administration (FDA) cite five highly infective pathogens that can be transmitted by food workers and cause severe illness. These five foodborne pathogens, also known as the “Big 5”, include Norovirus, the Hepatitis A virus, *Salmonella* Typhi, *Shigella spp.*, and *Escherichia coli (E.coli) O157:H7* or other Enterohemorrhagic or Shiga-toxin producing *E. coli*. Other, less infectious pathogens that can also be transmitted by food employees to consumers through contaminated food include *Staphylococcus aureus*, *Salmonella spp.*, and *Streptococcus pyogenes*.

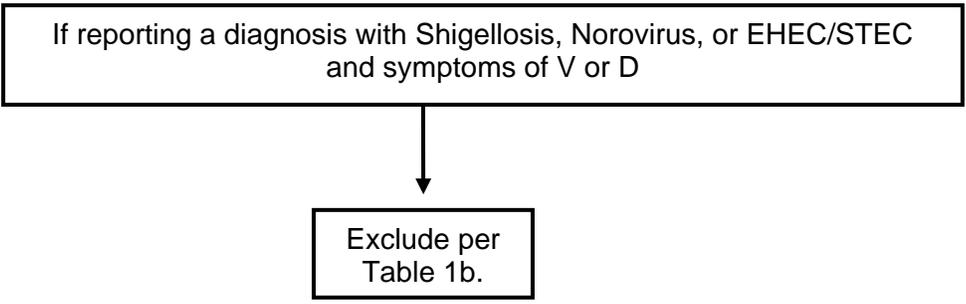
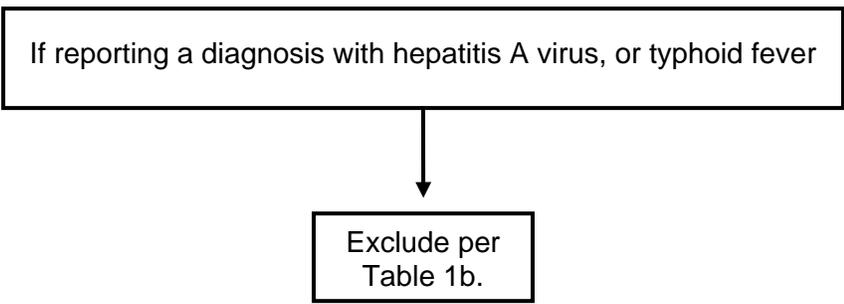
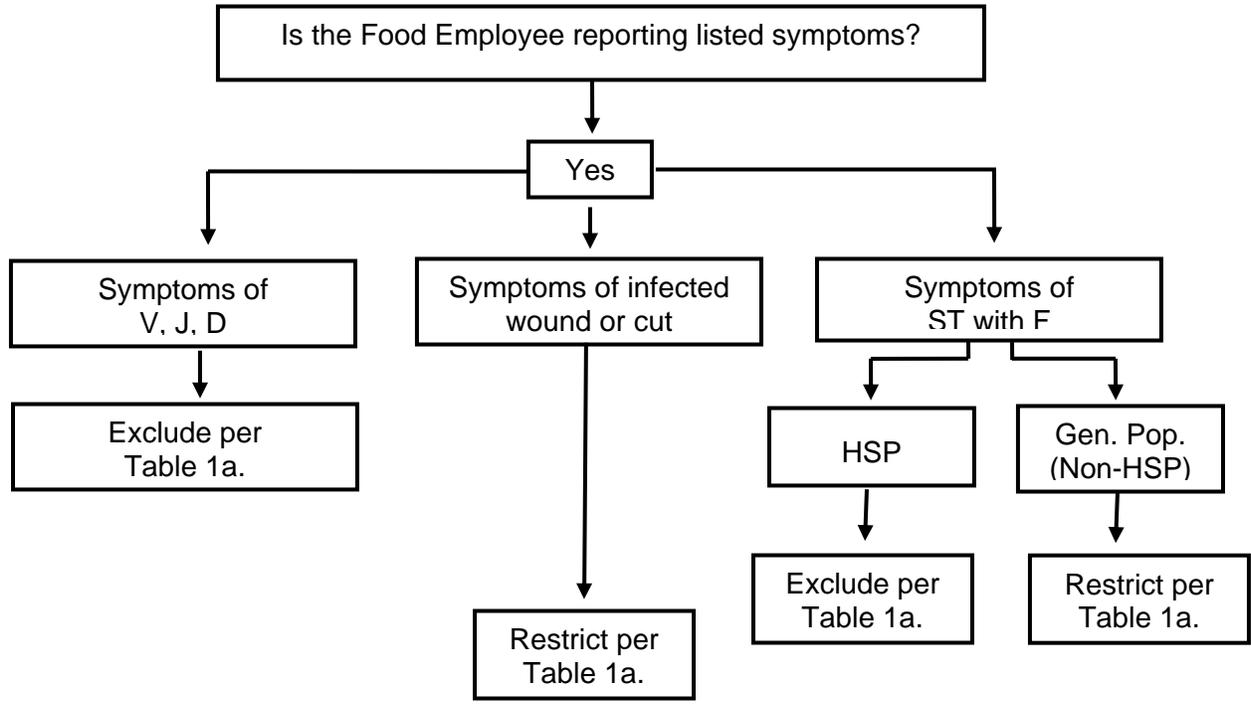
Proper management of a food establishment involves ensuring that food employees do not work when they are ill and having procedures for identifying employees who may transmit foodborne pathogens to food, other employees, and customers.

Management must ensure that food employees and “conditional” hires alike are aware of the reporting requirements for foodborne illness symptoms and diagnoses. When a food employee or conditional food employee reports either an exposure to, or symptoms of, or a diagnosis with foodborne illness, the person in charge (PIC) must take action to prevent the transmission of foodborne bacteria and/or viruses from the infected food employee to the food. The PIC must understand the requirements for restricting, excluding, and reinstating food employees.

A correlation between the severity of a food employee’s clinical illness and the level of exclusion and restriction required to eliminate the risk has been established. These levels were created to protect public health while avoiding unnecessary disruption to the employee schedule and the retail establishment’s operation.

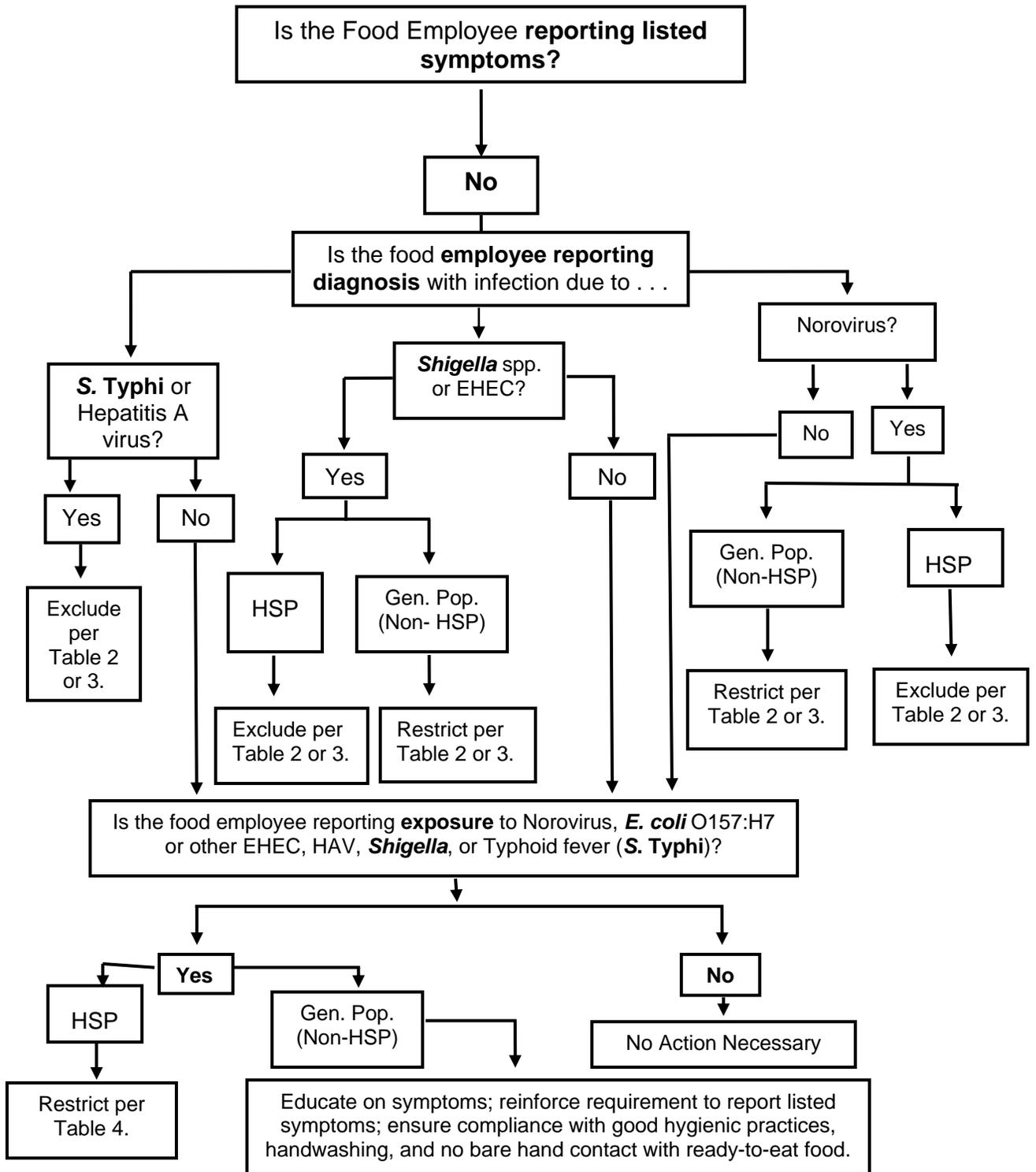
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**Decision Tree 1: When to exclude or restrict a food employee who reports a symptom and when to exclude a food employee who reports a diagnosis with symptoms under the Food Regulations.**



**Key:**  
 Listed Symptoms for Reporting: (V) Vomiting; (J) Jaundice; (D) Diarrhea; (ST with F) Sore Throat with Fever; (HSP) Highly Susceptible Population; (Gen. Pop.) General Population

**Decision Tree 2: When to exclude or restrict a food employee who is asymptomatic and reports a listed diagnosis and when to restrict a food employee who reports a listed exposure under the Food Regulations**



Key: (HSP) Highly Susceptible Population; (Gen. Pop.) General Population

**Table 1a: Summary of requirements for symptomatic food employees**

<b>Food employees and conditional employees shall report symptoms immediately to the person in charge</b>				
The person in charge shall prohibit a conditional employee that reports a listed symptom from becoming a food employee until meeting the criteria listed in section 12 VAC 5-421-100 of the Food Regulations, for reinstatement of a symptomatic food employee.				
Symptom	EXCLUSION/ OR RESTRICTION		Removing symptomatic food employees from exclusion or restriction	RA Approval Needed to Return to Work
	Facilities Serving a HSP	Facilities not serving a HSP		
Vomiting	<b>EXCLUDE</b> (90-1-a)	<b>EXCLUDE</b> (90-1-a)	When the excluded food employee has been asymptomatic for at least 24 hours or provides medical documentation (100-1-a). <b>Exceptions:</b> If diagnosed with Norovirus, <i>Shigella</i> spp., <i>E. coli</i> O157:H7 or other EHEC, HAV, or typhoid fever ( <b>S. Typhi</b> ) (see Tables 1b & 2).	No if not diagnosed
Diarrhea	<b>EXCLUDE</b> (90-1-a)	<b>EXCLUDE</b> (90-1-a)	When the excluded food employee has been asymptomatic for at least 24 hours or provides medical documentation (100-1-a). <b>Exceptions:</b> If Diagnosed with Norovirus, <i>E. coli</i> O157:H7 or other EHEC, HAV, or <b>S. Typhi</b> (see Tables 1b & 2).	No if not diagnosed
Jaundice	<b>EXCLUDE</b> (90-2-a) if the onset occurred within the last 7 days	<b>EXCLUDE</b> (90-2-a) if the onset occurred within the last 7 days	When approval is obtained from the RA (100-2) and: <ul style="list-style-type: none"> <li>• Food employee has been jaundiced for more than 7 calendar days (100-2-a) or</li> <li>• Provides medical documentation (100-2-c).</li> </ul>	Yes
Sore Throat with Fever	<b>EXCLUDE</b> (90-7-a)	<b>RESTRICT</b> (90-7-b)	When food employee provides written medical documentation (100-7-a through c)	No
Infected wound or pustular boil	<b>RESTRICT</b> (90-8)	<b>RESTRICT</b> (90-8)	When the infected wound or boil is properly covered (100-8-a through c).	No

**Key for Tables 1, 2, 3, and 4:**

**RA = Regulatory Authority**

**EHEC = Enterohemorrhagic, or Shiga toxin-producing *Escherichia coli***

**HAV = Hepatitis A virus**

**HSP = Highly Susceptible Population**

**Table 1b: Summary of requirements for diagnosed, symptomatic food employees**

<b>Food employees and conditional employees shall report a listed diagnosis with symptoms immediately to the person in charge</b>			
<b>The person in charge shall notify the RA when a food employee is jaundiced or reports a listed diagnosis</b>			
The person in charge shall prohibit a conditional employee that reports a listed diagnosis with symptoms from becoming a food employee until meeting the criteria listed in section 12 VAC 5-421-100 of the Food Regulations, for reinstatement of a diagnosed, symptomatic food employee.			
<b>Diagnosis</b>	<b>EXCLUSION Facilities Serving HSP or not Serving HSP</b>	<b>Removing diagnosed, symptomatic food employees from exclusion</b>	<b>RA Approval Needed to Return to Work</b>
Hepatitis A virus	<b>EXCLUDE</b> if within 14 days of any symptom, or within 7 days of jaundice (90-2-b)	When approval is obtained from the RA (100-2) and: <ul style="list-style-type: none"> <li>The food employee has been jaundiced for more than 7 calendar days (100-2-a) or</li> <li>The anicteric food employee has had symptoms or more than 14 days (100-2-b), or</li> <li>The food employee provides medical documentation (100-2-c) (also see Table 2).</li> </ul>	Yes
Typhoid Fever ( <b>S. Typhi</b> )	<b>EXCLUDE</b> (90-3)	When approval is obtained from the RA (100-3-a) and: <ul style="list-style-type: none"> <li>Food employee provides medical documentation, that states the food employee is free of a <b>S. Typhi</b> infection (100-3-b) (also see Table 2).</li> </ul>	Yes
<b>E. coli</b> O157:H7 or other EHEC/ STEC	<b>EXCLUDE</b> Based on vomiting or diarrhea symptoms, under (90-1-b)	<ol style="list-style-type: none"> <li><u>Serving Non-HSP facility:</u> (100-1-d-1): Shall only work on a restricted basis 24 hours after symptoms resolve and remains restricted until meeting the requirements listed below:</li> <li><u>Serving HSP facility:</u> (100-1-d-2): Remains excluded until meeting the requirements listed below: <ul style="list-style-type: none"> <li>Approval is obtained from RA (100-6) and</li> <li>Medically cleared (100-6-a); or</li> <li>More than 7 calendar days have passed since the food employee became asymptomatic (100-6-b) (also see Table 2).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility

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**Table 1b: Summary of requirements for diagnosed, symptomatic food employees (continued)**

Diagnosis	EXCLUSION Facilities Serving HSP or not Serving HSP	Removing diagnosed, symptomatic food employees from exclusion	RA Approval Needed to Return to Work
Norovirus	<b>EXCLUDE</b> Based on vomiting or diarrhea symptoms, under (90-1-b)	<ol style="list-style-type: none"> <li>1. <u>Serving non-HSP facility:</u> (100-1-b-1) Shall only work on a restricted basis 24 hours after symptoms resolve and remains restricted until meeting the requirements listed below:</li> <li>2. <u>Serving HSP facility:</u> (100-1-b-2) Remains excluded until meeting the requirements listed below:                             <ul style="list-style-type: none"> <li>• Approval is obtained from the RA (100-4), and</li> <li>• Medically cleared (100-4-a), or</li> <li>• More than 48 hours have passed since the food employee became asymptomatic (100-4-b) (also see Table 2).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility
<i>Shigella</i> spp.	<b>EXCLUDE</b> Based on vomiting or diarrhea symptoms, under (90-1-b)	<ol style="list-style-type: none"> <li>1. <u>Serving Non-HSP facility:</u> (100-1-c-1) Shall only work on a restricted basis 24 hours after symptoms resolve, and remains restricted until meeting the requirements listed below:</li> <li>2. <u>Serving HSP facility:</u> (100-1-c-2): Remains excluded until meeting the requirements listed below:                             <ul style="list-style-type: none"> <li>• Approval is obtained from the RA (100-5), and</li> <li>• Medically cleared (100-5-a), or</li> <li>• More than 7 calendar days have passed since the food employee became asymptomatic (100-5-b) (also see Table 2).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility

**Table 2: Summary of requirements for diagnosed food employees with resolved symptoms**

<b>Food employees and conditional employees shall report a listed diagnosis immediately to the person in charge</b>				
<b>The person in charge shall notify the RA when a food employee reports a listed diagnosis</b>				
The person in charge shall prohibit a conditional employee that reports a listed diagnosis from becoming a food employee until meeting the criteria listed in section 12 VAC 5-421-100 of the Food Regulations, for reinstatement of a diagnosed food employee.				
<b>Pathogen Diagnosis</b>	<b>Facilities Serving HSP</b>	<b>Facilities Not Serving HSP</b>	<b>Removing Diagnosed Food Employees with Resolved Symptoms from Exclusion or Restriction</b>	<b>RA Approval Required to Return to Work</b>
Typhoid fever ( <b>S. Typhi</b> ) including previous illness with <b>S. Typhi</b> (80-A-3)	<b>EXCLUDE</b> (90-3)	<b>EXCLUDE</b> (90-3)	When approval is obtained from the RA (100-3-a), and: <ul style="list-style-type: none"> <li>Food employee provides medical documentation, that states the food employee is free of a <b>S. Typhi</b> infection (100-3-b) (also see Table 1b).</li> </ul>	Yes
<b>Shigella</b> spp.	<b>EXCLUDE</b> (90-5-a)	<b>RESTRICT</b> (90-5-b)	<ol style="list-style-type: none"> <li><u>Serving Non-HSP facility:</u> (100-1-c-1) Shall only work on a restricted basis 24 hours after symptoms resolve, and remains restricted until meeting the requirements listed below:</li> <li><u>Serving HSP facility:</u> (100-1-c-2): Remains excluded until meeting the requirements listed below: <ul style="list-style-type: none"> <li>Approval is obtained from the RA (100-5), and:</li> <li>Medically cleared (100-5-a), or</li> <li>More than 7 calendar days have passed since the food employee became asymptomatic (100-5-b) (also see Table 1b).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility

**(Continued on p.8)**

**Table 2: Summary of requirements for diagnosed food employees with resolved symptoms  
(continued)**

<b>Pathogen Diagnosis</b>	<b>Facilities Serving HSP</b>	<b>Facilities Not Serving HSP</b>	<b>Removing Diagnosed Food Employee with Resolved Symptoms from Exclusion or Restriction</b>	<b>RA Approval Required to Return to Work</b>
Norovirus	<b>EXCLUDE</b> (90-4-a)	<b>RESTRICT</b> (90-4-b)	<ol style="list-style-type: none"> <li><u>Serving Non-HSP facility:</u> (100-1-b-1): Shall only work on a restricted basis 24 hours after symptoms resolve and remains restricted until meeting the requirements listed below:</li> <li><u>Serving HSP facility:</u> (100-1-b-2): Remains excluded until meeting the requirements listed below: <ul style="list-style-type: none"> <li>Approval is obtained from the RA (100-4), and:</li> <li>Medically cleared (100-4-a), or</li> <li>More than 48 hours have passed since the food employee became asymptomatic (100-4-b) (also see Table 1b).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility
<i>E. coli</i> O157:H7 or other EHEC/ STEC	<b>EXCLUDE</b> (90-6-a)	<b>RESTRICT</b> (90-6-b)	<ol style="list-style-type: none"> <li><u>Serving Non-HSP facility:</u> (100-1-d-1): Shall only work on a restricted basis 24 hours after symptoms resolve and remains restricted until meeting the requirements listed below:</li> <li><u>Serving HSP facility:</u> (100-1-d-2): Remains excluded until meeting the requirements listed below: <ul style="list-style-type: none"> <li>Approval is obtained from the RA (100-6), and:</li> <li>Medically cleared (100-6-a), or</li> <li>More than 7 calendar days have passed since the food employee became asymptomatic (100-6-b).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility

**(Continued on p.9)**

**Table 2: Summary of requirements for diagnosed food employees with resolved symptoms (continued)**

<b>Pathogen Diagnosis</b>	<b>Facilities Serving HSP</b>	<b>Facilities Not Serving HSP</b>	<b>Removing Diagnosed Food Employees with Resolved Symptoms from Exclusion or Restriction</b>	<b>RA Approval Required to Return to Work</b>
Hepatitis A virus	<b>EXCLUDE</b> if within 14 days of any symptom, or within 7 days of jaundice (90-2-b)	<b>EXCLUDE</b> if within 14 days of any symptom, or within 7 days of jaundice (90-2-b)	When approval is obtained from the RA (100-2), and: <ul style="list-style-type: none"> <li>• The food employee has been jaundiced for more than 7 calendar days (100-2-a), or</li> <li>• The anicteric food employee has had symptoms for more than 14 (100-2-b), or</li> <li>• The food employee provides medical documentation (100-2-c) (see also Table 1b).</li> </ul>	Yes

**Table 3: Summary of requirements for diagnosed food employees who never develop gastrointestinal symptoms**

<b>Food employees and conditional employees shall report a listed diagnosis immediately to the person in charge</b>				
<b>The person in charge shall notify the RA when a food employee reports a listed diagnosis</b>				
The person in charge shall prohibit a conditional employee that reports a listed diagnosis from becoming a food employee until meeting the criteria listed in section 12 VAC 5-421-100 of the Food Code, for reinstatement of a diagnosed food employee				
<b>Pathogen Diagnosis</b>	<b>Facilities Serving HSP</b>	<b>Facilities Not Serving HSP</b>	<b>Removing Diagnosed Food Employees Who Never Develop Gastrointestinal Symptoms from Exclusion or Restriction</b>	<b>RA Approval Required to Return to Work</b>
Typhoid Fever ( <b>S. Typhi</b> ) including previous illness with <b>S. Typhi</b> (see 80-A-3)	<b>EXCLUDE</b> (90-3)	<b>EXCLUDE</b> (90-3)	When approval is obtained from the RA (100-3-a), and:  Food employee provides medical documentation, specifying that the food employee is free of a <b>S. Typhi</b> infection (100-3-b).	Yes
<b>Shigella</b> spp.	<b>EXCLUDE</b> (90-5-a)	<b>RESTRICT</b> (90-5-b)	Remains excluded or restricted until approval is obtained from the RA, and: <ul style="list-style-type: none"> <li>• Medically cleared (100-5-a), or</li> <li>• More than 7 calendar days have passed since the food employee was last diagnosed (100-5-c).</li> </ul>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility
Norovirus	<b>EXCLUDE</b> (90-4-a)	<b>RESTRICT</b> (90-4-b)	Remains excluded or restricted until approval is obtained from the RA (100-4), and <ul style="list-style-type: none"> <li>• Medically cleared (100-4-a), or</li> <li>• More than 48 hours have passed since the food employee was diagnosed (100-4-c).</li> </ul>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility

**Continued on p.11**

**Table 3: Summary of requirements for diagnosed food employees who never develop gastrointestinal symptoms (continued)**

Pathogen Diagnosis	Facilities Serving HSP	Facilities Not Serving HSP	Removing Diagnosed Food Employees Who Never Develop Gastrointestinal Symptoms from Exclusion or Restriction	RA Approval Required to Return to Work
<i>E. coli</i> O157:H7 or other EHEC/ STEC	<b>EXCLUDE</b> (100-6-a)	<b>RESTRICT</b> (100-6-b)	Remains excluded or restricted until approval is obtained from the RA (100-6), and: <ul style="list-style-type: none"> <li>• Medically cleared (100-6-a), or</li> <li>• More than 7 calendar days have passed since the food employee was diagnosed (100-6-c).</li> </ul>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility
Hepatitis A virus	<b>EXCLUDE</b> (90-2-c)	<b>EXCLUDE</b> (90-2-c)	When approval is obtained from the RA (100-2), and <ul style="list-style-type: none"> <li>• The anicteric food employee has had symptoms for more than 14 days (100-2-b), or</li> <li>• The food employee provides medical documentation (100-2-c).</li> </ul>	Yes

**Key for Tables 1, 2, 3, and 4:**

**RA = Regulatory Authority**

**EHEC = Enterohemorrhagic, or Shiga toxin-producing *Escherichia coli***

**HAV = Hepatitis A virus**

**HSP = Highly Susceptible Population**

**Table 4: History of Exposure, and Absent Symptoms or Diagnosis**

Food employees and conditional employees shall report a listed exposure to the person in charge				
The person in charge shall prohibit a conditional employee who reports a listed exposure from becoming a food employee in a facility serving a HSP until meeting the criteria listed in section 12 VAC 5-421-100 of the Food Regulations, for reinstatement of an exposed food employee				
The person in charge shall reinforce and ensure compliance with good hygienic practices, symptom reporting requirements, proper handwashing and no BHC with RTE foods for all food employees that report a listed exposure				
Pathogen Diagnosis	Facilities Serving HSP	Facilities Not Serving HSP	When Can the Restricted Food Employee Return to Work?	RA Approval needed
Typhoid Fever ( <i>S. Typhi</i> )	<b>RESTRICT</b> (90-9)	Educate food employee on symptoms to watch for and ensure compliance with GHP, handwashing and no BHC with RTE foods.	(100-9-c) When 14 calendar days have passed since the last exposure, or more than 14 days has passed since the food employee's household contact became asymptomatic.	No
<i>Shigella</i> spp.	<b>RESTRICT</b> (90-9)	Educate food employee on symptoms to watch for and ensure compliance with GHP, handwashing and no BHC with RTE foods.	(100-9-b) When more than 3 calendar days have passed since the last exposure, or more than 3 days have passed since the food employee's household contact became asymptomatic.	No
Norovirus	<b>RESTRICT</b> (90-9)	Educate food employee on symptoms to watch for and ensure compliance with GHP, handwashing and no bare hand contact with RTE foods.	(100-9-a) When more than 48 hours have passed since the last exposure, or more than 48 hours has passed since the food employee's household contact became asymptomatic.	No
<i>E. coli</i> O157:H7 or other EHEC/ STEC	<b>RESTRICT</b> (90-9)	Educate food employee on symptoms to watch for and ensure compliance with GHP, handwashing and no bare hand contact with RTE foods.	(100-9-b) When more than 3 calendar days have passed since the last exposure, or more than 3 calendar days has passed since the food employee's household contact became asymptomatic.	No
Hepatitis A virus	<b>RESTRICT</b> (90-9)	Educate food employee on symptoms to watch for and ensure compliance with GHP, handwashing and no bare hand contact with RTE foods.	(100-9-d) When any of the following conditions is met: * The food employee is immune to HAV infection because of a prior illness from HAV, vaccination against HAV, or IgG administration; or * More than 30 calendar days have passed since the last exposure; or since the food employee's household contact became jaundiced; or * The food employee does not use an alternative procedure that allows BHC with RTE food until at least 30 days after the potential exposure, and the employee receives additional training.	No

**Key for Table 4:** GHP = Good Hygienic Practices; RTE = Ready-to-Eat foods; BHC = Bare Hand Contact