

What did the 2017-2018 Restaurant data collection find out about Food Safety Management Systems?

The 2017-2018 restaurant data collection of the National Retail Risk Factor Study found that Food Safety Management Systems (FSMS) were the strongest predictor of the compliance status of risk factors. A FSMS refers to a specific set of actions and or procedures to help achieve active managerial control. While FSMS vary across the retail and food service industry, the consistent components include the purposeful implementation of procedures, training, and monitoring. [You can find more information on FSMS here.](#)

Prevention strategies for norovirus are centered on preventing viral contamination and transmission, however there is currently no single effective strategy for preventing foodborne norovirus in food establishments. This is why the FDA Food Code recommends the use of a combination of prevention strategies, and why the development of FSMS to systematically reduce the risk of norovirus is so important.

Our study observed that as FSMS development and documentation improves, personal hygiene, and protection from contamination improves. Our study also observed that employee health policies fell short in several areas that could benefit from developing FSMS to address employee health.

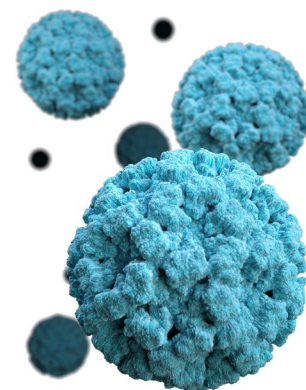
See www.fda.gov/retailfoodriskfactorstudy for more information and complete results of our data collection.

What is norovirus and why is controlling it important?

Norovirus is the leading cause of foodborne illness in the United States, [accounting for roughly 52%](#) of all foodborne illness cases. The CDC estimates 19-21 million cases of gastroenteritis are caused by norovirus each year. These cases in turn cause 109,000 hospitalizations and 900 deaths.

Norovirus infections spread very rapidly. Those infected are contagious from the moment they begin feeling ill through the beginning of recovery. Norovirus can spread by:

- having direct contact with an infected person,
- eating or drinking foods or liquids contaminated with the virus,
- touching objects with norovirus particles on them and then putting contaminated fingers into the mouth,
- or sharing utensils with infected persons.



What does the FDA Food Code outline as norovirus prevention strategies?

The National Retail Food Risk Factor Study is based on the intervention strategies to reduce foodborne illness risk factors outlined in the Food Code. The Food Code targets prevention of norovirus by addressing the following:



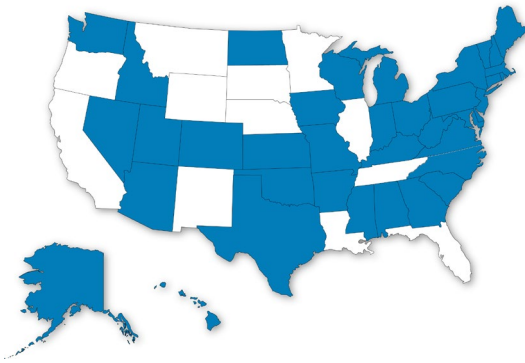
How can regulators address norovirus in their Codes?

State, local, tribal, and territorial jurisdictions should adopt and enforce provisions of the FDA Food Code to address norovirus. Key provisions to combat norovirus at retail include employee health policies, hand washing and handling practices, prevention of cross-contamination, and requiring vomit and diarrheal response plans. These response plans are critical if someone becomes ill in a food establishment because the virus is highly infectious.

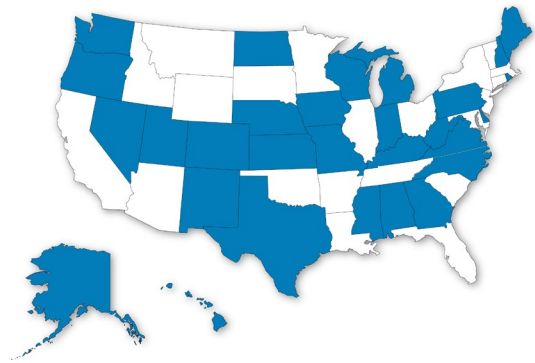
[A study conducted by the Centers for Disease Control and Prevention \(CDC\) in 2016](#) indicated that adopting these provisions may decrease the incidence and severity of foodborne norovirus outbreaks. The study also indicated that many states had not yet adopted these critical provisions (see figure 1).

■ provision adopted by the state □ provision not adopted by the state

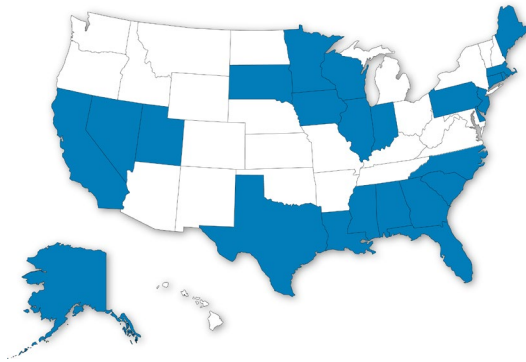
Prohibition of bare-hand contact



24-hour exclusion of ill workers



Certified Food Protection Manager



Contamination event response plan

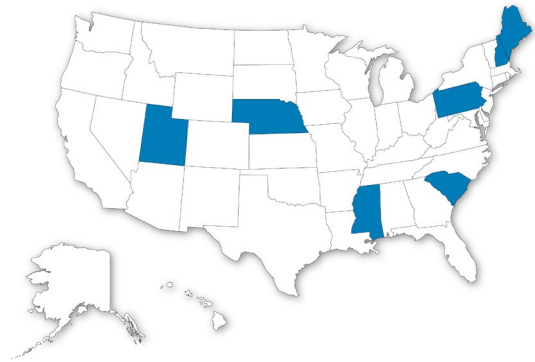


Figure 1: Adoption of selected food service provisions by state.

Kambhampati, A., Shioda, K., Gould, L. H., Sharp, D., Brown, L. G., Parashar, U. D., & Hall, A. J. (2016). A State-by-State Assessment of Food Service Regulations for Prevention of Norovirus Outbreaks. *Journal of food protection*, 79(9), 1527–1536. <https://doi.org/10.4315/0362-028X.JFP-16-088>

What can regulators do to reduce *Norovirus*?

Regulators should encourage the development, evaluation, and maintenance of FSMS to address norovirus. For combating norovirus, the three focus areas for FSMS are: personal hygiene, protection from contamination, and employee health. Here are some actions regulators can take:

[A study conducted by the Centers for Disease Control and Prevention \(CDC\) in 2016](#) indicated that adopting these provisions may decrease the incidence and severity of foodborne norovirus outbreaks. The study also indicated that many states had not yet adopted these critical provisions (see figure 1).

- talk to operators about their current procedures in each of these areas
- learn about how they train their staff on their policies and what their training includes
- ask how they ensure staff follow their procedures and how often these checks occur
- discuss corrective actions when staff aren't following the procedures
- provide feedback and resources to help the operator improve their FSMS

Resources

[The FDA Food Code](#) is the primary resource for compliance and enforcement of food safety provisions, and guidance for the reduction of Norovirus in retail food establishments. Below is a list of links to specific parts in the Food Code and its annexes to assist regulatory authorities in this effort to control norovirus at retail and foster FSMS. The annexes are provided specifically to assist the regulatory authority to apply the provisions of the Food Code uniformly and effectively. These resources can provide tremendous assistance to those charged with applying Food Code provisions.

Part 2-2 Employee Health

Part 2-3 Personal Cleanliness

Part 2-4 Hygienic Practices

Part 2-5 Responding to Contamination Events

Part 3-3 Protection from Contamination After Receiving

Food Code Annex 7, Form 1-B Conditional Employee or Food Employee Reporting Agreement

Below is a list of other federal resources available that can be used to assist in the development of FSMS in restaurants. We encourage establishments to utilize and share these and other available resources to make progress towards the prevention of foodborne illness risk factors.

- [Employee Health and Personal Hygiene Handbook](#)
- [Managing Food Safety: A Manual for the Voluntary Use of HACCP Principles for Operators of Food Service and Retail Establishments](#)
- [FDA Bad Bug Book](#)
- [Foodborne Illness Video Testimonials \(Norovirus\)](#)
- [Foodborne Illness Posters](#)
- [Risk Assessment of Norovirus Transmission in Food Establishments](#)
- [Norovirus Outbreaks and Restaurant Practices | NEARS | EHS | CDC](#)
- [Preventing Norovirus Outbreaks | VitalSigns | CDC](#)
- [Adoption of Food Code Linked to Lower Rates of Norovirus | EHS | CDC](#)
- [Can Restaurant Managers Talk with Sick Workers? | EHS | CDC](#)
- [Restaurants Can Manage Sick Workers to Help Prevent Outbreaks | EHS-Net | EHS | CDC](#)
- [Infographic Kitchen Manager Certification | EHS | CDC](#)

Questions?

For more information visit our website at: <http://www.fda.gov/RetailFoodProtection>