

Food Safety Update



This publication will keep operators of food service establishments up to date on food safety, regulations and foodborne illness. Content is generated as a collaboration between Fraser Health and Vancouver Coastal Health.

Health Protection | *Ensuring Healthy People and Healthy Environments*

2016



Provincial Guideline for Pooling Eggs Safely

Effective Date - March 1, 2016

Why was this guideline developed?

Since 2008, there has been a large increase in the number of people who have eaten eggs and become sick from *Salmonella enteritidis*. This disease-causing bacteria can contaminate both the outside and the inside of eggs and can cause severe illness including vomiting, diarrhea, and in rare cases, death. This guideline was developed to help reduce foodborne illnesses caused by *Salmonella enteritidis* that may be associated with foods made from eggs that are “pooled”. Following these guidelines will help ensure that the food you serve your customers is safe to eat.

What is pooling eggs and why is it dangerous?

“Pooling eggs” is the breaking of two or more raw eggs into a single container, whether the whole egg or only part of it is pooled. Basically, several eggs are cracked and put in a container; this is a common practice in many restaurants. As long as those eggs are properly handled and cooked, any *Salmonella enteritidis* that is present will be killed. However many dishes call for raw or lightly cooked eggs. When one contaminated egg is combined with other eggs, the whole batch can also become contaminated with *Salmonella enteritidis*. This is true whether you combine only two eggs or two hundred. This can greatly increase the number of people who might now become sick by the bacteria.

When is it OK to pool eggs?

The use of pooled eggs is only allowed under these conditions:

- The pooled eggs are for a single dish prepared for immediate consumption by one person (i.e. one person’s omelette or one person’s scrambled eggs); or
- The pooled eggs will be cooked to an internal temperature and holding time as prescribed in the table on page 2; or
- The pooled eggs are an ingredient in a food that will then be cooked to an internal temperature and holding time as prescribed in the table on page 2.



In addition, pooled eggs may not be stored – they must be used as soon as they are pooled.

Pasteurized eggs or pasteurized egg products must be used instead of pooled eggs if these conditions are not met. Pasteurized eggs can be purchased from restaurant suppliers and supermarkets and must be stored according to the manufacturer’s directions.

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How will this affect my business?

The new guideline takes effect on March 1, 2016 and will apply to all food premises in BC who use eggs.

You can get more information from your local Environmental Health Officer. The new guideline will be posted on the BC Centre for Disease Control (BCCDC) website www.bccdc.ca. ■

Minimum Internal Temperature * and Holding Times * for Cooking Pooled Eggs or Foods Containing Pooled Eggs	
Minimum Internal Temperature °C (°F)	Minimum Holding Time
63°C (145°F)	3 minutes
66°C (150°F)	1 minute
68°C (155°F)	15 seconds
70°C (158°F)	Less than 1 second (instantaneous)

* Pooled eggs cooked in a microwave oven must be heated to a minimum internal temperature of 74°C (165°F) and allowed to stand covered for at least 2 minutes before serving.

Shellfish Safety

It was a warm summer for BC Oysters

During the summer of 2015, British Columbia experienced an outbreak of *Vibrio parahaemolyticus*. There were 60 reported cases and all individuals had consumed raw oysters harvested in BC. Twenty eight of these illnesses were in Vancouver Coastal Health and twelve were in Fraser Health.

Vibrios are bacteria that live in marine waters where oysters grow. They can be found in higher numbers when the ocean water is warm like last summer.

Symptoms of an infection are watery diarrhea, cramps, nausea, chills, and fever, usually within 24 hours after eating contaminated food and can last up to seven days.

In response to the illnesses caused by *Vibrio parahaemolyticus*, the Health Authorities and the British Columbia Centre for Disease Control (BCCDC) took a number of actions. BCCDC issued a news release on July 31st about the increased risk of eating raw oysters. Health Authorities reminded restaurants about safe food handling and checking and recording temperatures when receiving and storing shellfish.

On August 12th, Vancouver Coastal Health issued an Order to restaurants located in the Health Authority prohibiting the sale of raw BC oysters. Vancouver Coastal Health already had a menu warning about the risk of eating raw oysters. Fraser Health issued public health warnings advising consumers about the increased risk of getting ill from eating raw oysters and issued orders to those premises that were serving raw BC oysters.

The order and warnings issued by Vancouver Coastal Health were lifted on September 17th when human cases and marine water temperatures had decreased. ■



Bivalve Shellfish - Dead or Alive

Bivalves are shellfish that have two shells which are hinged on one side. They may be served raw or cooked and include oysters, mussels, clams, and scallops. Potential food safety risks associated with shellfish include bacteria, viruses, and toxins that can cause foodborne illness.



Fresh whole (unshucked) shellfish are highly perishable, and should be kept alive until they are ready to serve. Examining the shell is a simple way to check if shellfish are still alive.

When shellfish are alive the shells may be open or closed. If the shell is closed the shellfish is alive and safe to serve. If the shell is open the shellfish may be dead. You can check if the shellfish is alive by lightly tapping on the shell; if the shell closes the shellfish is alive.

If the shell remains open after tapping on it, the shellfish is dead and should not be served. Some shellfish, such as soft-shell clams, can't completely close their shell, but the shell should move when tapped.

When you cook shellfish, cook only those with closed shells and serve them only after the shell has opened. ■

Bug Spotlight:

Clostridium perfringens

What is Clostridium perfringens

Clostridium perfringens is a bacterium commonly found in the intestine of humans and animals. It can also be found in soil and sewage. It is a common cause of foodborne illness, often occurring when foods are prepared in large quantities and kept warm for a long time before serving.

C. perfringens bacteria can grow rapidly at temperatures between 20°C to 60°C. This occurs when foods are improperly cooked, cooled and reheated. After eating, the bacteria produce a toxin in the gut that causes illness.

Typical symptoms of abdominal pain, diarrhea and nausea appear about 10 to 12 hours after eating contaminated food, but can start in as little as 6 hours or up to 24 hours after the meal. Symptoms of this intoxication generally last up to 24 hours.

Foods high in protein or starch, such as thick soups or stews, meat products, gravies or other cooked foods pose a greater risk of *C. perfringens* infection if they are not handled correctly.

Vancouver Coastal Health recently investigated a large outbreak of 202 reported illnesses caused by *C. perfringens* intoxication linked to a catered chicken lentil dish. This incident serves as a reminder that this foodborne illness is preventable using proper food handling procedures:

- Ensure that foods are cooked to the appropriate temperatures.
- Large batches of food must be divided into smaller pans and cooled from 60°C to 20°C within 2 hours, and then down to 4°C within 4 hours.
- Reheat foods quickly and thoroughly to 74°C.
- Keep foods out of the danger zone (4°C to 60°C). Cold foods must be stored at or below 4°C and hot foods at 60°C or higher. ■

Pest Control in Food Premises

If a pest problem is severe enough, a facility may be closed by an Environmental Health Officer.

Pests can have a major impact on food premises costing the owner money from damaged product, potential illness to customers and attract social and public media attention.

There are several simple actions that you can take to control pests. Many of these actions can be done with minimal effort. Ensuring early control will help prevent the possibility of a larger infestation which are more difficult and expensive to eliminate.

- **Prevent the entry of pests** - The first step in controlling pests is to prevent their entry. Ensure that doors and windows are kept closed or are screened. Doors should not have large gaps at the bottom. Fill any visible gaps or holes where pests may enter such as holes in drywall, under gaps in delivery doors, and where water lines enter the food premises.
- **Monitor for Pest activity** - Catching a pest problem before it becomes widespread is important. Monitoring for pests includes placing traps inside the premises and routinely inspecting for signs of pest activity – such as rodent droppings.
- **Control Food Sources** - Pests are attracted to food so don't give them a reason to come in. Ensure food sources are kept to a minimum by storing food in a manner that prevents access by pests such as storing bulk foods in covered or sealed containers. Promptly clean up any food spills, and ensure a high level of sanitation.
- **Prevent harborage** - Don't give pests a place to hide! Store food and other items off the floor. Trim back vegetation from the outside of the food premises, and ensure that outside garbage cans are properly sealed and garbage areas are cleaned regularly. ■



Answers to crossword
on page 4

Across

4. Raw
7. March
9. Enteritidis
12. Danger zone (2 wds)
15. Perfringens
17. Closed
18. Prevent

Down

1. Forty five (2 wds)
2. Pasteurized
3. Pooling eggs (2 wds)
5. Droppings
6. Thermometer
8. Vibrio
10. Harborage
11. Food
12. Divide
13. Oysters
16. Cold

Hot Water Requirements

What you need to know

An adequate supply of hot water is an important factor in reducing the risk of foodborne illness. However, many operators of food premises underestimate the importance of a plentiful supply of hot water which is essential for proper handwashing, and cleaning and sanitizing equipment and food contact surfaces. All food premises must be capable of supplying hot and cold water that is adequate in quantity and pressure especially during peak water demand periods. In some instances your premises could be closed if you lack hot water.

How do I know the water is "hot"?

- Check the temperature of the hot water at a faucet. Run the tap water until it is hot and then use a probe thermometer to measure the water temperature. Hot water should be at least 45°C for manual dishwashing.
- Check the temperature of hot water at the faucet during periods of high use to ensure that your hot water supply is sufficient at all times.

- If you use a mechanical dishwasher check the manufacturer's specifications to see what the incoming water temperature should be and then check the temperature of the hot water at the faucet closest to the machine. This should give a good indication of the incoming water temperature for the dishwasher.



How do I know if I have enough hot water?

If you can fill your dishwashing sinks with hot water and still have enough for hand washing, for cleaning and to run your dishwasher, then your hot water supply is probably adequate. If your hot water is cool or lukewarm, then your hot water supply is not sufficient to meet your facility's needs and you may need to upgrade your system. ■

Crossword Test your food safety knowledge

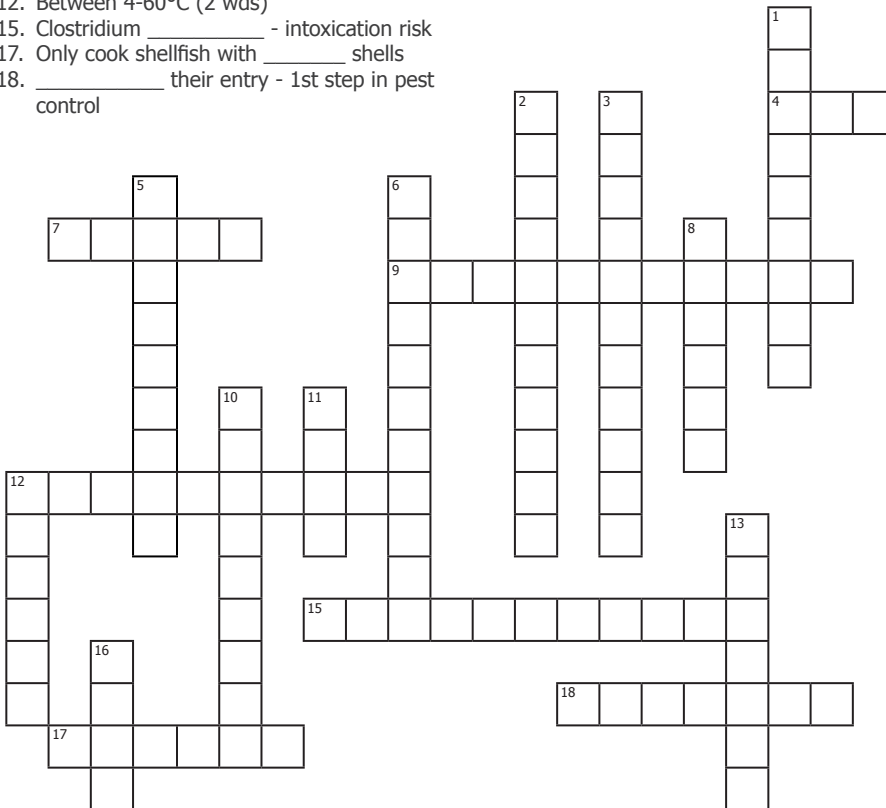
Across

- Increased risk of getting ill from eating _____ oysters
- Effective date for Pooling Eggs guideline
- Salmonella _____ - Egg illness
- Between 4-60°C (2 wds)
- Clostridium _____ - intoxication risk
- Only cook shellfish with _____ shells
- _____ their entry - 1st step in pest control

Down

- Minimum hot water temperature (2 wds)
- Commercially _____ eggs
- Potentially dangerous egg practice (2 wds)

- Signs of pest activity - rodent _____
- Instrument to check temperature
- _____ Parahaemolyticus - Shellfish illness
- Prevent _____ - Don't give pests a place to hide
- Pests are attracted to _____
- _____ large batches of food to cool quicker
- Summer shellfish recall
- Keep _____ at 4°C or below



Feedback

Tell us what you think of our Food Safety Update and topics you would like to see in future issues. Contact liz.postnikoff@fraserhealth.ca or Claudia. Kurzac@vch.ca.

This update has been prepared and published as a collaboration between Health Protection departments in Fraser Health and Vancouver Coastal Health.

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