

Guarding against norovirus

- 1) Norovirus-related food poisoning is back this season after Japan saw 416 cases affecting 17,632 people in 2013. The health and welfare ministry says the number of cases has been rising for the past 10 years.
- 2) At a Kyoto hospital, four **inpatients**, 83 to 91 years old, died of the poisoning in mid-December. Norovirus poisoning also hit students at 15 elementary schools in Hamamatsu, Shizuoka Prefecture, in mid-January. On Jan. 16 alone, some 1,000 students were absent from school. Those schools were closed **temporarily**.
- 3) One needs to **discard** the **notion** that food poisoning happens only in warmer seasons. Norovirus food poisoning continues into February. **Disinfection** by alcohol does not work. Frequent hand-washing with soap is the easiest and most effective **preventive measure, in particular** after using the toilet.
- 4) The norovirus is **spherical**-shaped and relatively small with a **diameter** of just 30 to 40 **nanometers** and is spread through **fecally contaminated** food, **aerosolization** and person-to-person contact. It is highly **infective**; fewer than 100 noroviruses can cause illness. One gram of **excreta** from an infected patient contains 1 million to 1 billion noroviruses. In one reported case, a person showed symptoms more than 10 days after unknowingly **picking up** norovirus from a carpet.
- 5) A person infected by the norovirus usually starts experiencing **diarrhea** or **vomiting** after one or two days. **Infants** and elderly people can suffer **dehydration** from diarrhea or **suffocation** caused by vomit getting stuck in their throats. There are no known drugs or **vaccines** that can weaken or kill noroviruses.
- 6) Noroviruses often accumulate in bivalve shellfish such as clams and oysters. If shellfish is not well-cooked, there is high risk of infection. Food should be heated to the core at a temperature of 85 to 90 Celsius for more than 1½ minutes to kill any noroviruses. It is also important to disinfect cookware with high heat or **chlorine-based disinfectants** as alcohol does not work.
- 7) Cleaning up the vomit of norovirus patients demands **utmost precaution**, including the use of **surgical** masks and **disposable** rubber gloves. The vomit must be wiped up with a paper towel and thrown away in a plastic garbage bag. The surface should then be wiped with a paper towel soaked with a 0.1 percent **sodium hypochlorite** (*ji-a-en-so-san natoriumu*) **solution**, and then the towel, the gloves and the mask must be disposed of in the garbage bag. Hands should be thoroughly washed with soap.
- 8) Attention must be paid to the fact that people who work in the food industry are increasingly becoming sources of norovirus infection. In the poisoning case at the Hamamatsu elementary schools, noroviruses were detected in bread served during the school lunch and in four workers at a bread factory. Food-industry workers must frequently wash their hands with soap and hot water, and use disposable rubber gloves when handling food. 【01/26/2014/Japan Times】

inpatient:入金患者 temporarily:一時的に discard:捨てる notion:概念 disinfection:消毒、殺菌 preventive measure:予防策 in particular:特に spherical:球状の diameter:直径 nanometer:ナノメートル(10億分の1メートル) fecal:大便の contaminate:汚染する aerosolization:エアゾール化 infective:伝染性の excreta:排泄物 pick up virus:ウイルスに感染する diarrhea:下痢 vomit:嘔吐する infant:幼児 dehydration:脱水(症) suffocation:窒息 vaccine:ワクチン chlorine-based disinfectant:塩素系消毒液 utmost precaution:最大の予防策 surgical:外科の disposable:処分 sodium:ナトリウム hypochlorite:次亜塩素酸塩 solution:溶液 下のニュースより confectionery:菓子製造の inappropriate:不適切な



You don't want it.

Norovirus detected in 3 employees at bread supplier to Hamamatsu schools

HAMAMATSU, Shizuoka -- In a case of widespread food poisoning in which some 1,000 elementary school students fell ill, the Hamamatsu Municipal Government announced that the norovirus was detected in three female employees at the company that supplied the bread served in school lunches.

The three women work for the **confectionery** company Hofuku, which manufactured the bread eaten by students and teachers for lunch before they developed food poisoning symptoms. The women checked each piece of bread individually for any foreign materials, and city officials believe the virus was transferred from the employees' hands to the bread.

"There's a possibility that gloves were exchanged at **inappropriate** times, or that employees did not clean their hands thoroughly," an official from the Hamamatsu municipal public health center said. 【01/20/2014/Mainichi】

★Ice breaker for active discussion★

1. Have you ever experienced being food poisoned before? Can you narrate your experience? What was the source of the poisoning?
2. What are the common wrong notions of people regarding food poisoning?
3. Please list the effective preventive measures against food poisoning based on the article.
Can you think of other ways to protect ourselves from food poisoning?
4. In case that one of your family members shows sign of food poisoning, what first aid will you perform?
5. Food poisoning is caused by virus. Can you name some other types of viruses? How about illnesses caused by viruses?
6. What are the difference between virus and bacteria?
7. Make sentences using following words: suffocation, dehydration, inpatient, infective, discard, symptoms, infant, solution and disposal.

感染性胃腸炎を引き起こすノロウイルス。細菌の30分の1と微小で、皮膚の角質に付着しやすく、飛散しやすいため強い感染力が強いとされます。潜伏期間は24～48時間で、吐き気、嘔吐、下痢、腹痛等が主症状です。今回の浜松では、調理担当者は症状を示さない「不顕性感染」で、防止のむずかしさが浮き彫りになりました。また昨年12月にはノロウイルスによる集団感染で、京都の病院の高齢の入院患者4人が亡くなっています。