

Foodborne Illness Prevention and Control Policy

Han, Jeong A

Foodborne Disease prevention and Surveillance Division Food Safety Policy Bureau



CONTENTS

01.

Trends of Foodborne Illness Outbreak

02.

Introduction to Foodborne Illness Prevention Policy

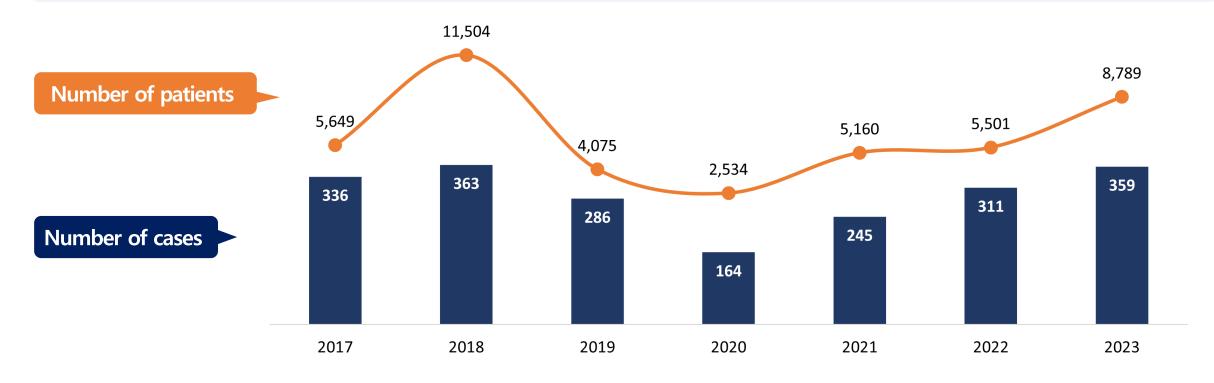
03.

Education and Promotion for Foodborne Illness Prevention

01. Trends of Foodborne Illness Outbreaks

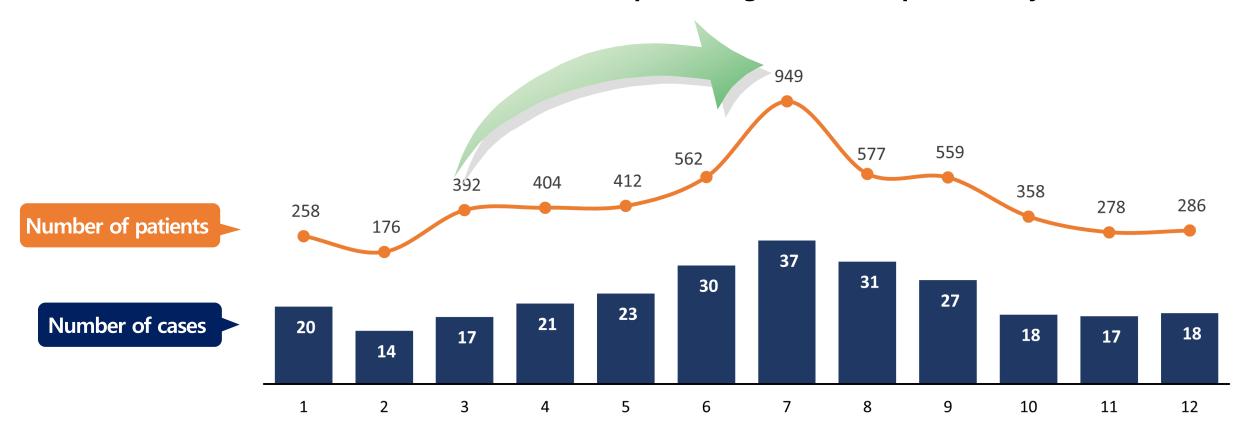
Foodborne illness Outbreaks by Year

- Annual foodborne illness outbreaks have decreased since 2018, but saw an increase again following the COVID-19 pandemic in 2020.
- Climate change and extreme heat as risk factors
- Rise in food delivery and mass catering



Monthly Outbreaks (5-year average, 2019-23)

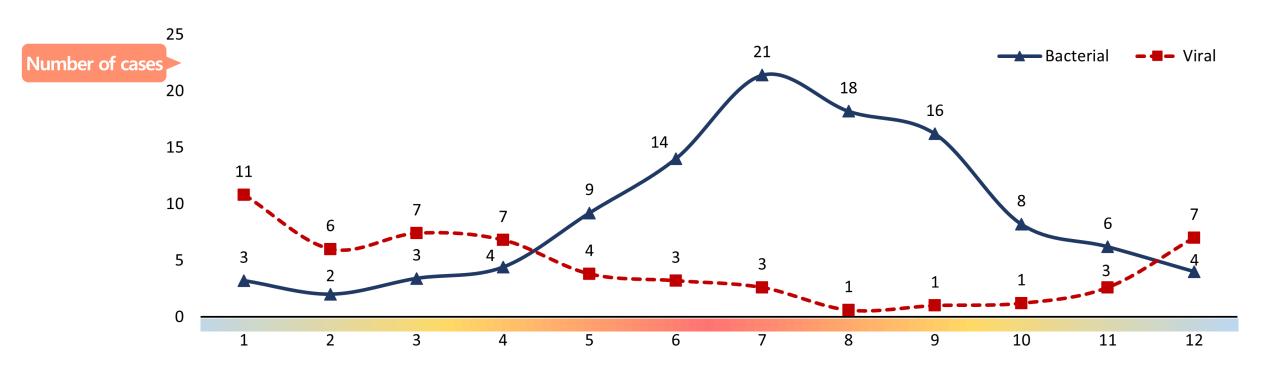
Outbreaks increase from March as temperature rises, peaking during the summer season,
 and decline from October Number of food poisoning cases and patients by month



Trend of foodborne outbreaks per month

Seasonal Outbreaks (5-year average, 2019-23)

- Bacterial foodborne illness mainly outbreaks in the summer season.
- Viral outbreaks mainly occur in winter season (recent norovirus cases occur throughout the year)



Trends in foodborne illness outbreaks

02. Introduction to Foodborne Illness Prevention Policy

Intergovernmental Foodborne Illness Collaborative Team

youth training facilities

Inter-Governmental Joint Response Establish a collaborative system for preventing and managing foodborne illness through pangovernmental consultation body, involving 34 institutions, to coordinate countermeasures → Held 3 times a year: High-level, Summer, Winter



seafood production

Foodborne Illness Prevention Activities (Mock drills for foodborne illness outbreaks)

Foodborne Illness Drills

- Timely mock drills conducted considering the timing of foodborne illness outbreaks
 - * Bacterial foodborne illness in May, norovirus in October
- ✓ Swift reporting drills to maintain a rapid reporting system
 - * February, October
- ✓ On-site response drills to strengthen the organic response system with related organizations
 - * Led by Local govs. (April), Led by provincial and municipal govs. (May)



On-site response drill (2nd)

Led by MFDS and Regional Offices, participation of related organisations

Rapid reporting drill (4th)

Led by MFDS, participation of local govs.

2024년

Feb.

Apr.

May

Oct.

Rapid reporting drill (1st)

Led by MFDS, participation of local govs.

On-site response drill (3rd)

Led by provincial and municipal govs., participation of city and district govs.

Response procedure for Foodborne outbresks



Initial Report

Physicians, patients, or consumers report to local public health centers.



Response Team Formation

Epidemiologists and officials begin investigation.



Investigation Activities

Patient interviews, facility inspections, clinical, food, and environmental samples collection.



Laboratory Analysis

Regional labs test clinical, food, and environmental samples. Until test results are available, suspected foods may be subject to temporary sales suspension.



Enforcement Actions

Upon confirmation, authorities may issue recalls, enforcement orders and administrative sanctions.

Response produre for Foodborne outbresks

Rapid PCR Testing



Using real-time PCR, 17 bacterial species and norovirus detected within 4 hours

Mobile Laboratories



Six vehicles equipped for on-site testing at major events



Immediate Sharing



Results communicated to local health centers

Targeted Investigation



Testing focuses on foods historically linked to detected pathogens

Operation of Rapid Inspection Vehicles



Six fully-equipped mobile lab
can be deployed to outbreak sites
or major events.

These specialized vehicles enable on-site testing,
eliminating delays associated
with sample transport to central facilities.



On-Site Analysis

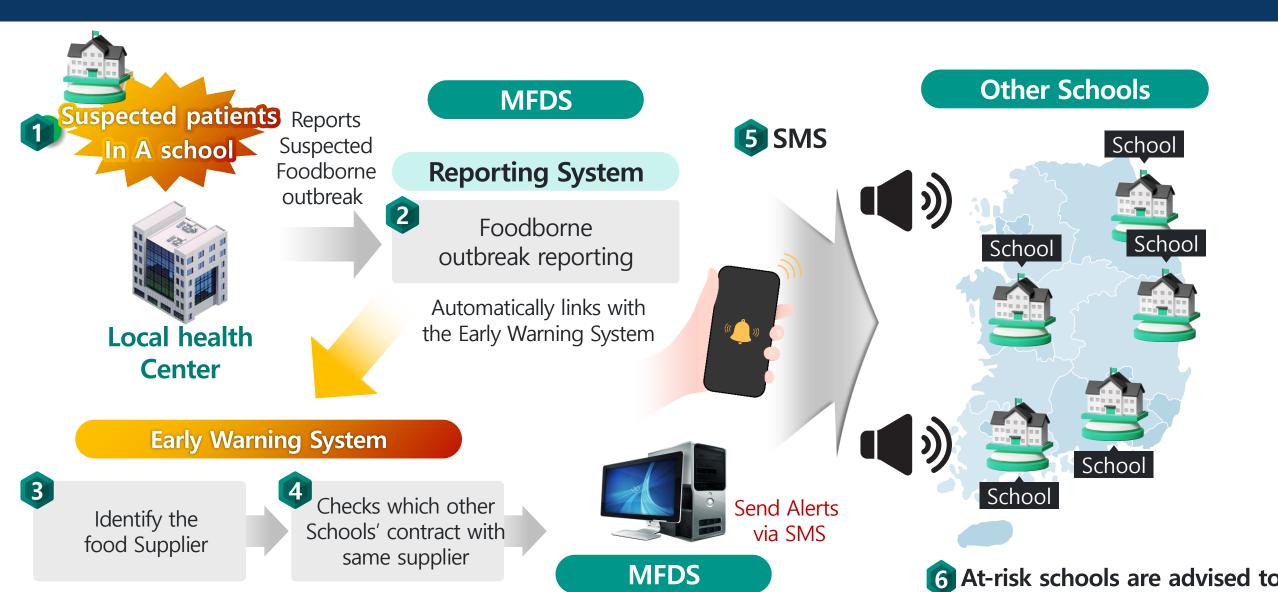
Each mobile unit is equipped with PCR equipment, sample preparation areas. Trained technicians can process samples from preparation to final analysis entirely within the vehicle.



During international events, these mobile units conduct preventive screening of high-risk foods before distribution. This proactive approach has successfully prevented foodborne illness outbreaks at major international events.

✓ Mobile labs improve outbreak response by enabling faster testing on-site, reducing delays and limiting the spreading of contamination.

Early Waring System



exercise caution

Foodborne illness prediction map

Foodborne Illness
Prediction Map

- ✓ Quantification of the probability of foodborne illness outbreaks and classify it into four stages, and provide nationwide and regional indices in map format throughout the year.
 - → Provide customized services centered on the public

चित्रक द्वित्रवाक्ष वृद्धान्यक
 च्यानिकाल
 च्चानिकाल
 च्यानिकाल
 च्यानिकाल

- * Foodborne illness prediction index display
- 4 stages : Attention (below 40),

 Caution (40~70),

 Warning (70~90),
 - Danger (above 90)
 Meteorological info., monthly alert,
 - cautionary food for foodborne
 - illness, prevention tips



식중독 예측지도

미 기점도 가이트

Update: 2020/09/21 14:4

< Website for foodborne illness prediction map https://poisonmap.mfds.go.kr >

Foodborne Illness Prevention Activities (Providing vomit disposal kits)







Safety Management of Group Meal Facilities

- ✓ Intensive guidance and inspection of group meal facilities at schools and kindergartens used by children and adolescents
- ▶ Joint inspection and guidance of schools, kindergartens and their food suppliers at the beginning of the school year [Mar., Aug.-Sep.]

- ▶ Joint inspection, guidance, and education for all childcare facilities [May, Oct.]
 - Inspection of all childcare facilities and guidance and euducations on norovirus prevention during the winter season

- ► Special hygiene inspections of meal facilities with inadequate hygiene management [Apr., June, July].
 - Special inspections for youth training facilities, social welfare facilities, and facilities

Restaurant Certification System (Restaurant Hygiene Rating System)

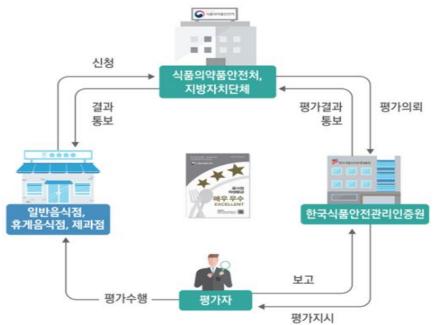
Restaurant Hygiene Rating

With increased dining out, hygiene issues at resturants are constantly pointed out to ensure safe food

Restaurant certification system needed for objective assessment of hygiene levels Need reduce foodborne illness outbreaks through improve restaurant hygiene



66,339 restaurants designated





'매우 우수'

90점 이상





`우수' 85점 이상 90점 미만 `좋음' 80점 이상 85점 미만

Display of Hygiene Rating System-Designated Restaurants - Signage





Hygiene rating sign at the entrance

In-store X-banner advertisement

Wrapper stickers for delivery & banner at the entrance

03. Foodborne Illness Prevention Education and Promotion

Public Education and Promotion of Foodborne Illness Prevention

Intensive promotion of food poisoning prevention in summer season

- ✓ Intensified promotional efforts at the government-level during periods of hightened concerns for foodborne illness outbreaks
- ✓ Utilization of various mass media and promotional tools of infrastructure (related organizations, associations, etc.) to expand information exposure
- ✓ Public relations specialists for each region to provide on-site guidance

Online education for foodborne illness prevention

- ✓ Special education for school meal service staff at schools on foodborne illness prevention and distribution of guidelines
 - * (School principals) Capacity-building education in collaboration with the Office of Education
 - * (Nutritionist (nutrition teacher)) Training programme and production and distribution of foodborne illness prevention guidelines (in the form of workbooks)
- ✓ Foodborne illness prevention education for social welfare facilities and distribution of manuals, etc.
- ✓ Operation of educational programmes, including cause investigation courses for the person in charge and expert training



Promotion of Foodborne Illness Prevention

- ► (Slogan) "Safe Eating 365, MFDS!"
 Safe Eating 365 Days with MFDS
- ► (Message) 6 Steps for Foodborne Illness Prevention
 Wash your hands with soap, Cooking Thoroughly,
 Boiling water, Cleaning and Disinfecting,
 Separating, Storing at right temperature
- ► (Character) Characters for foodborne illness prevention and food culture improvement

Dr. Ji-Keep: Guardian of the public's food safety, emphasizing professionalism

Care-Roo and Na-Su-Low: Guides to food culture, image of nurturing, proper eating habits, healthy children



Characters Foodborne Illness Prevention

지킬박사(Dr. Ji-Keep)

케어루(Care-Roo), 나슈로(Na-Su-Low)





Characters for food safety and hygiene improvement, promotion of foodborne illness prevention and sodium and sugar reduction

Promotion Utilizing Characters

Character costume (3 types)



케어루

지킬박사

나슈로

Character signboards (3 types)



Banners (2 types)



Promotion of Foodborne Illness Prevention





Quiz with Pororo and Dr. Ji-Keep

- ▶ Production of educational promotional videos on major outbreak cases by season and prevention tips for everyday life
 - Broadcasting through MFDS YouTube, Facebook, Instagram, and website









- ➤ Spreading messages to promote foodborne illness prevention through various contents
- Diversification of contents (manuals, posters, card news, etc.) to deliver tailored information on food foodborne illness prevention prevention for each season and target viewer
- ► Maximization of promotional effects utilizing videos
- Tailored promotion for the public, food service workers, childcare teachers, etc.





Promotional Content for Foodborne Illness Prevention

Video













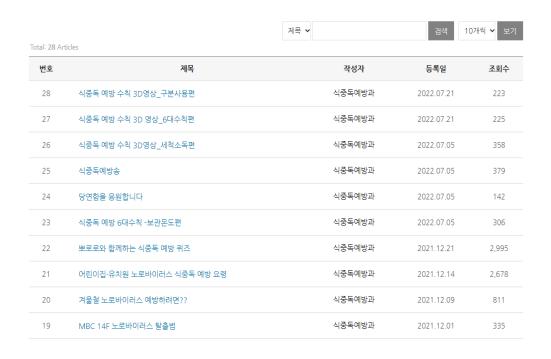
Posters, Card News



Information on Foodborne Illness Prevention Promotion

• Food Safety Korea (www.foodsafetykorea.go.kr) → Hazard and Prevention → Foodborne Illness Information → Foodborne Illness Prevention Videos

식중독 예방 동영상



Foodborne Illness Prevention Song



Foodborne Illness Prevention Tips (3D video)



Quiz with Pororo and Dr. Ji-Keep



Temperature Control





