



SOUTHERN NEVADA HEALTH DISTRICT
ENVIRONMENTAL HEALTH DIVISION

MESQUITE

FOOD SAFETY PARTNERSHIP MEETING

All are welcome
to attend this
open meeting!

January 31, 2018



AGENDA

- Introductions
 - Food Ops Leadership/Training
- Imminent Health Hazards
 - Aaron DelCotto
- Epidemiology
 - Christine Sylvis
- Q & A



Imminent Health Hazards

Aaron DelCotto

EH Supervisor

Southern Nevada Health District

Topics to be Discussed

- ▶ What is an Imminent Health Hazard?
- ▶ Requirements of the PIC
- ▶ Examples of Imminent Health Hazards
- ▶ Contingency Plans
- ▶ Recap
- ▶ Questions?

What is an Imminent Health Hazard?

Imminent Health Hazard:

A significant threat or danger to health that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance, or event creates a situation that requires **immediate correction or cessation of operation** to prevent injury based on: (A) The nature, severity, and duration of the anticipated injury, illness, or disease. (B) The number of potential injuries and illnesses to the public's health.

Requirements of the PIC

- ▶ Step 1:
 - ▶ Stop food handling and sales to assess the situation
- ▶ Step 2:
 - ▶ Contact SNHD
- ▶ Step 3:
 - ▶ Determine if you can operate again with stipulations in place
 - ▶ This means, develop a Contingency Plan

Requirements of the PIC

- Food Operations General Number
 - 702-759-1110
- Larry Rogers-EH Manager
 - 702-759-0837
- Jackie Reszetar-EH Director
 - 702-759-0837
- 24 hour number
 - 702-759-1600

What should I do if an imminent health hazard occurs at my food establishment?

Immediately notify the health district and voluntarily discontinue operations. The health district will discuss the hazard with you and may approve a contingency plan. {8-204.12(f)}

If you fail to notify the health district and continue operations during an imminent health hazard, you will be issued a cease and desist order. You will also be assessed fees and required to pass an inspection, with fewer than 10 and no identical repeat critical or major violations prior to reopening.

If your facility is closed for excessive violations with a history of non-compliance, including repeat critical or major violations, you may be required to attend a supervisory conference before an inspection to reopen the facility. Additionally, you will be required to pay all applicable fees before the inspection.

When in doubt, contact the health district food inspection operations office that inspects your establishment.

What is an imminent health hazard? Examples include but are not limited to

- Fire
- Flood
- No hot water
- No water
- Power outage
- Inadequate refrigeration
- Sewage backup
- Misuse of poisonous or toxic materials
- Onset of a suspected foodborne illness outbreak
- Pest infestation
- Gross unsanitary occurrences or conditions, or other circumstances that may endanger public health

Please contact SNHD if you encounter an imminent health hazard at one of the following numbers:

- Food Operations General Contact Number
 - 702-759-1110 Desk
- Larry Rogers - Food Operations Manager
 - 702-759-0837 Desk
- Jackie Reszetar - Environmental Health Director
 - 702-759-0590 Desk

If a hazard occurs outside our regular business hours, call our 24-hour phone number (702) 759-1600, choose the Environmental Health option and then press '1' to speak with an after-hours inspector.

Examples of Imminent Health Hazards

- ▶ Fire
- ▶ Flood
- ▶ No hot water/no water
- ▶ Power outage
- ▶ Inadequate refrigeration
- ▶ Sewage backup
- ▶ Pest Infestation
- ▶ Misuse of poisonous or toxic items
- ▶ Suspected foodborne illness outbreak
- ▶ Gross unsanitary conditions
- ▶ Other conditions which may jeopardize public health

Fire



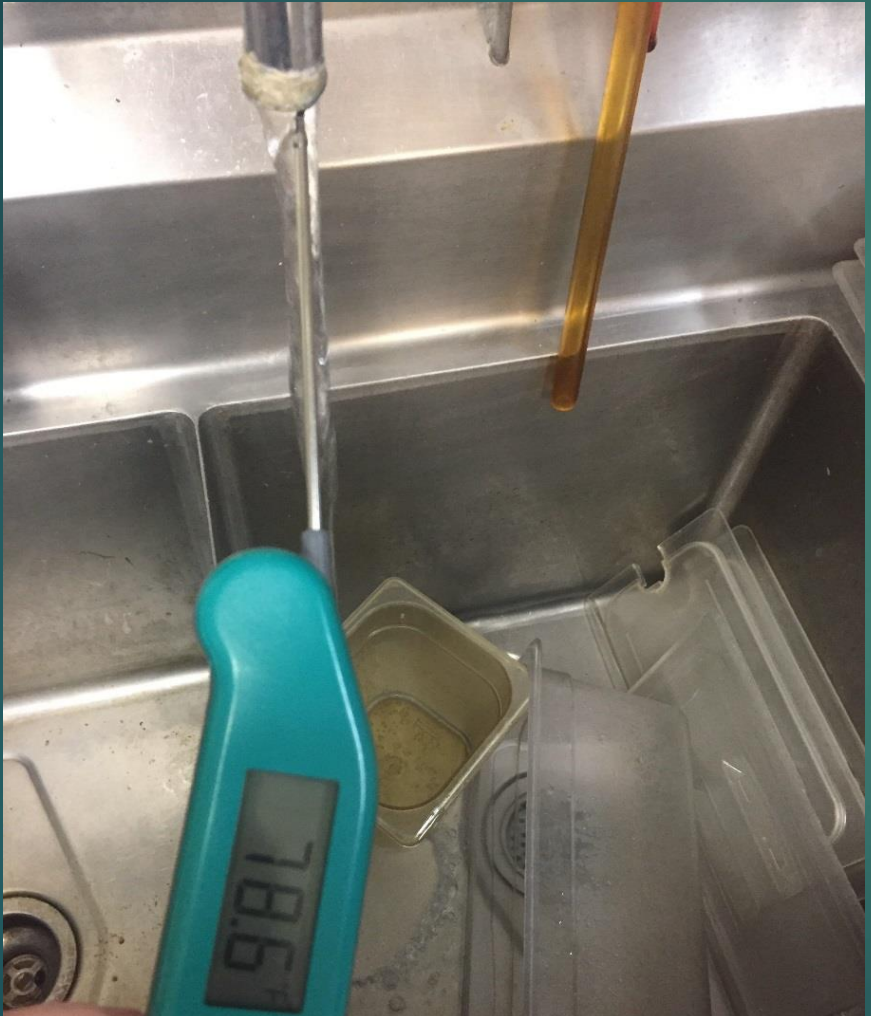
Flood



Flood



No Hot Water



Power Outage

- ▶ No power can cause a number of issues like inadequate lighting and refrigeration issues



Power Outage



Inadequate Refrigeration



- Foods out of temperature due to lack of working refrigeration
- Facility cannot safely operate

Sewage back up



Sewage back up



Pests



Pests



Pests



Pests



Pests



06/30/2011 08:26

Misuse of poisonous or toxic items

- Use of chemicals not in accordance with labeling instructions
- Chemicals have been used in a manner that food and food contact surfaces are not protected from contamination



Suspected foodborne illness outbreak

- Closure could occur if:
 - Multiple reports identify that foodborne illness may be linked to a facility
 - Uncontrolled risk factors exist that are associated with an epidemiological investigation



Other conditions which jeopardize public health

- ▶ Some examples include:
 - ▶ Foodhandlers unable to wash hands due to no soap/paper towels/handsink
 - ▶ Three compartment sink not functional/missing
 - ▶ Construction taking place while in operation
 - ▶ Gas leak

Gross/Unsanitary Conditions





08/30/2012 13:15







10/29/2012 09:10











02/26/2013 14:28



03/13/2013 10:52





02/06/2017 13:16







07/10/2012 08:36



09/04/2013 08:23





05/20/2014 14:52





06/04/2014 22:44



04/19/2012 14:56











08/19/2014 13:56



08/19/2014 13:55



12/30/2014 10:05



05/20/2014 13:52

Contingency Plans



- ▶ Regulation require food establishments to CLOSE if an imminent health hazard exists and contact SNHD before resuming operations
- ▶ If the hazard is not corrected, but a facility can operate again with stipulations (special conditions) in place...that is a contingency plan

Contingency Plans

What is a contingency plan?

- ▶ A plan, developed by the facility, to explain how they will control for hazards and safely operate on a temporary basis during an imminent health hazard. The plan is submitted to the SNHD for approval.
- ▶ A contingency plan is not acceptable for all imminent health hazard situations.

What types of situations?

- ▶ No hot water
- ▶ Power outage (short time)
- ▶ Sewage backup (contained area)
- ▶ Pest problems
- ▶ Unsanitary conditions

Contingency Plans

What should your plan include?

- ▶ Written notice to SNHD
- ▶ What is the problem
- ▶ Area affected
- ▶ Inspector's contact info
- ▶ Plan to contact your inspector
- ▶ Plan to close if the problem cannot be controlled

- ▶ Operating Procedures for:
 - ▶ Cleaning
 - ▶ Equipment storage
 - ▶ Personal hygiene procedure
 - ▶ Limiting menu
- ▶ Contact info for Person in Charge
- ▶ Monitoring and verification
- ▶ Timeframes
- ▶ Re-opening procedure

Contingency Plans



Step 1:

- ▶ Submit the plan to SNHD for approval

Step 2:

- ▶ Ensure your Person In Charge keeps in communication with SNHD

Step 3:

- ▶ Notify SNHD when the problem is corrected or if things change

Resources Online: FERL

- ▶ Imminent Health Hazards FAQ:

<http://www.southernnevadahealthdistrict.org/ferl/imminent-health-hazards.php>

- ▶ Appendix H: Checklist for Re-opening after an IHH:

<http://www.southernnevadahealthdistrict.org/download/eh/food-regs-append-h.pdf>

Recap



- ▶ What is an Imminent Health Hazard?
- ▶ Requirements as the PIC
- ▶ Examples of Imminent Health Hazards
- ▶ Contingency Plans

Questions?



Aaron DelCotto, REHS

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Foodborne Illness Investigations

Presented by:

Christine Sylvis

Environmental Health Supervisor

Training and Compliance

The Team

- Food Operations (your main contact)
 - Routine inspections, focus on prevention
- Office of Epidemiology and Disease Surveillance
 - Receive and research complaints
- Foodborne Illness Investigation Team
 - Follow up on complaints by conducting an environmental assessment

OEDS Receives Possible Foodborne Related Report

Complaints of Foodborne Illness

Morbidity Reports

The screenshot shows the Southern Nevada Health District website. The header includes navigation links like Home, Contact Us, Locations, AZ, How Do I?, News & Noteworthy, and Feedback. The main banner features the slogan 'healthy people in a healthy Southern Nevada' and the Southern Nevada Health District logo. Below the banner is a navigation menu with categories: Programs, Clinics, Permits & Regulations, Health Topics, News & Information, and About Us. The central focus is the 'Foodborne Illness Complaint Form', which is currently on 'Step 1 of 4: Contact Information'. The form includes fields for: *First Name, *Last Name, *Phone Number, *Email Address, Address, *Zip, and a question 'Are you one of the people who became ill?' with Yes/No radio buttons. 'Back' and 'Next' buttons are at the bottom.

The screenshot shows the 'State of Nevada Confidential Morbidity Report Form' (dated August 2007). It is a detailed form divided into sections for 'Provider' and 'Patient'. The 'Provider' section includes fields for Attending Physician, Person Reporting / Job Title, Facility Name, and various phone numbers. The 'Patient' section includes fields for Name, Gender, Race, Address, City, State, Zip, Date of Birth / Age, Parent or Guardian Name, Pregnancy EDC, Primary Language Spoken, Home Phone, Occupation / Employer / School, Marital Status, Birth Country and Arrival Date, Social Security Number, Medical Record Number, Incarcerated, and Disease or Condition Name. There are also checkboxes for 'Was laboratory testing ordered?' and 'Was the patient treated?'. The form is titled 'Confidential Morbidity Report Form'.



Nevada Administrative Code: 441A Reportable Diseases, Conditions and Events



Reportable Diseases, Conditions and Events

Clark County, Nevada

The Nevada Administrative Code Chapter 441A and county disease reporting regulations require reports of specified diseases, foodborne illness outbreaks and extraordinary occurrences of illness be made to the local Health Authority (Southern Nevada Health District [SNHD]). Disease reporting allows SNHD to rapidly respond and prevent additional illness, recognize trends in diseases of public health importance and to intervene in outbreak or epidemic situations

Physicians, veterinarians, dentists, chiropractors, registered nurses, directors of medical facilities, medical laboratories, blood banks, school authorities, college administrators, directors of child care facilities, nursing homes, parole and probation officers, pharmacists, insurers and correctional institutions are required to report. Failure to report is a misdemeanor and may be subject to an administrative fine of \$1,000 for each violation.

Contact Numbers for Reporting Diseases and Conditions

Diseases to Report	Phone	Fax	Animal Bites	Phone
HIV/AIDS	(702) 759-0727	(702) 868-2822	Clark County	(702) 455-7710, x1
Sexually Transmitted Infections	(702) 759-0727	(702) 868-2822	Las Vegas	(702) 229-6444, x2
Tuberculosis	(702) 759-1370	(702) 633-0975	North Las Vegas	(702) 633-1750
Other Reportable Diseases	(702) 759-1300, x2	(702) 759-1414	Henderson	(702) 267-4970, x4
Outbreaks	(702) 759-1300, x2	(702) 759-1414	Boulder City	(702) 293-9283
Extraordinary Occurrences of Disease	(702) 759-1300, x2	(702) 759-1414	Mesquite	(702) 346-5268

The following must be reported by the next SNHD business day, unless otherwise noted:

AIDS	Hantavirus	Respiratory Syncytial Virus infection (RSV)
Amebiasis	Hemolytic-uremic syndrome (HUS)	Rotavirus
☎ Animal bite from a rabies susceptible species	24 Hepatitis A and E	24† Rubella (including congenital)
☎† Anthrax	Hepatitis B, C, D and unspecified	☎† Salmonellosis
‡ Arsenic: Exposures and elevated levels	HIV infection	☎† SARS
☎† Botulism	Influenza	Severe Reaction to Immunization
24 Brucellosis	☎† Novel influenza (known or suspect pandemic strain)	Shigellosis
Campylobacteriosis	‡ Lead: Exposures and elevated levels	☎† Smallpox (variola)
CD4 lymphocyte counts <500/μL	Legionellosis	Spotted fever Rickettsiosis (e.g., Rocky Mountain Spotted Fever)
Chancroid	Leptospirosis	Streptococcal toxic shock syndrome
Chlamydia	Listeriosis	Streptococcus pneumoniae Invasive Disease
24 Cholera	Lyme Disease	Syphilis (including congenital)
Coccidioidomycosis	Lymphogranuloma venereum	Tetanus
Cryptosporidiosis	Malaria	Toxic Shock Syndrome
24† Diphtheria	24† Measles (rubeola)	Trichinosis
‡ Drowning	☎† Meningitis (specific type)	24† Tuberculosis
Ehrlichiosis/Anaplasmosis	☎† Meningococcal Disease	☎† Tularemia
Encephalitis	‡ Mercury: Exposures and elevated levels	24 Typhoid Fever
Enterohemorrhagic Escherichia coli (STEC, E. coli O157:H7)	24 Mumps	Vancomycin-intermediate Staphylococcus aureus (VISA) infection
†† Exposures of large groups of people to disease-causing agents	☎† Outbreaks of communicable disease	Vancomycin-resistant Staphylococcus aureus (VRSA) infection
☎† Extraordinary occurrence of illness (Dengue, Typhus Fever)	☎† Outbreaks of foodborne disease	Vibriosis, Non-Cholera
Giardiasis	24 24 Pertussis	Viral hemorrhagic fever
Gonorrhea	☎† Plague	West Nile Virus
Granuloma inguinale	☎† Poliomyelitis	Yellow Fever Infection
Haemophilus influenzae (invasive)	☎† Psittacosis	Yersiniosis
Hansen's Disease (leprosy)	☎† Q Fever	
	☎† Rabies (in human or animal)	
	Relapsing Fever	

☎ Report immediately by phone 24 Report within 24 hours; use after-hours reporting system if needed † Report when suspect (do not wait for lab confirmation) †† Reportable in Clark County only

Southern Nevada Health District Office of Epidemiology • <http://www.southernnevadahealthdistrict.org/disease-reporting/disease-reporting.php>

24-HOUR PUBLIC HEALTH EMERGENCY LINE (702) 759-1300, OPT. 2

Revised 8-13

SNhD
Southern Nevada Health District



And the Investigation Begins

- Review information and request additional information
 - Chart reviews (electronic and on site)
 - Records requests
 - Contact provider
 - Laboratory Test results
 - Organism identification, additional DNA fingerprinting
- Interview the ill person or parent/guardian of the ill person
- Laboratory Test Results



Disease Investigation Cont.

- Post Interview Analysis

- Does the information add up?

- Did the client eat at a restaurant during the incubation period?
 - Does the illness align with the food consumed?
 - How many people reporting illness? And.....do they live in the same house

- Assessment of the severity or seriousness of the illness

- Are there separate reports with the same illness and a common food source or restaurant?
 - Was the person hospitalized? Death?



Foodborne Illness Disease Investigation Outcomes

- Subsequent action depends on disease and circumstances
 - Exclusion from sensitive occupation/situation
 - Recommend isolation or quarantine
 - Arrange for prophylaxis or immunization of contacts
 - Possible notification/referral to SNHD's Environmental Health Team

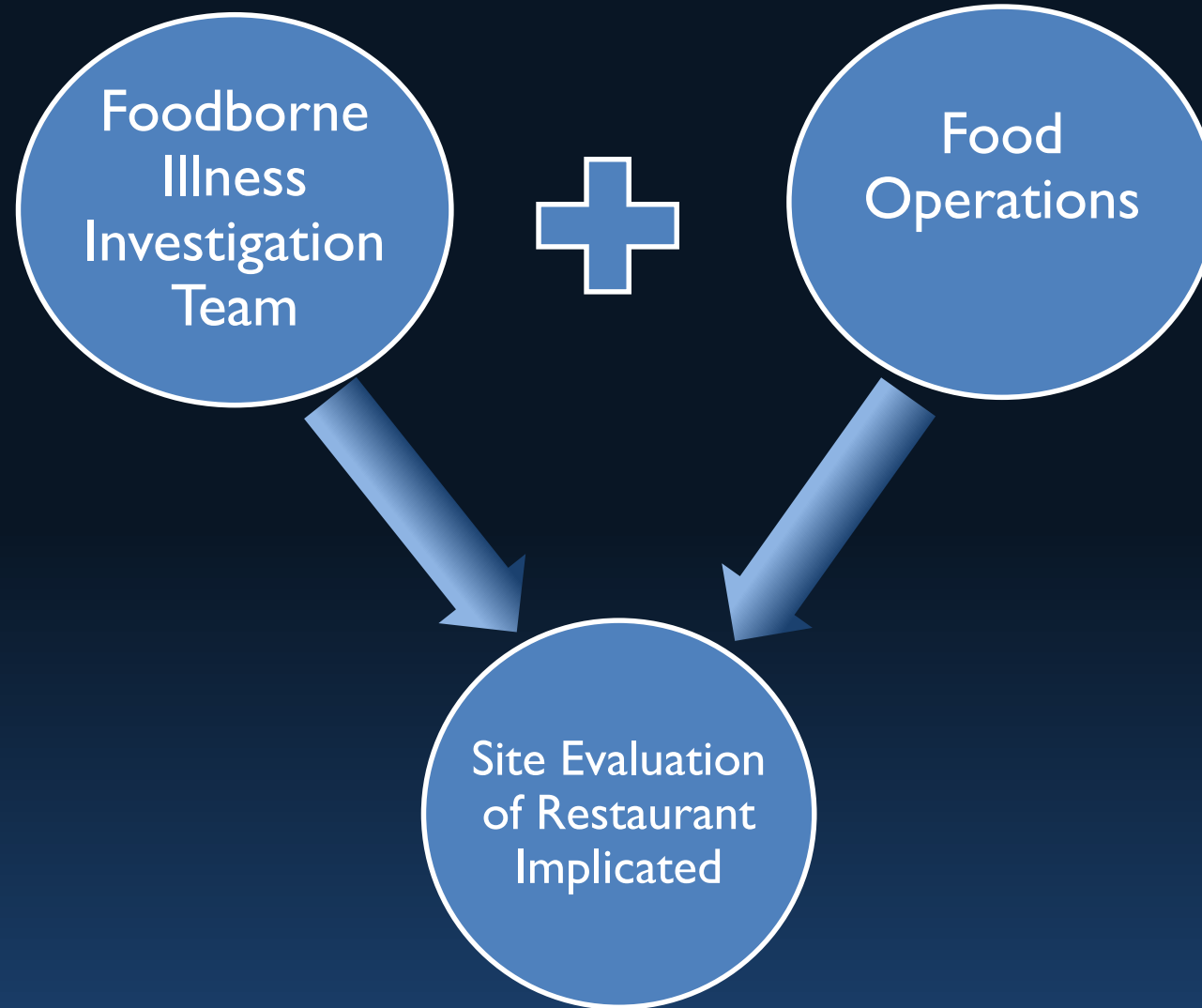


Referral to Environmental Health



- Inspection
- Survey
- Complaint
- No Action

Gather the Team



“We’re here today because we received a complaint of illness from your restaurant”



Doesn't mean...

- ...Your restaurant made them sick
- ...We're closing your restaurant today



Does mean...

- We'll take a look at your food safety practices
 - Are there things that have the POTENTIAL to make people sick?
 - If so, we'll put corrective actions in place now, and brainstorm ways to prevent them in the future

Site Visit

- All of the things a regular inspection covers, plus more
- Two inspectors
 - Routine inspection
 - A snapshot of food safety
 - Investigation
 - An in depth examination of certain factors

the what
and the why

What are we looking at more in depth?

- Depends on the information we have (OEDS investigation):
 - Focus on a particular food item
 - Focus on a particular risk factor

Reducing Foodborne Illness Risk Factors



The following risk factors are major causes of foodborne illness (FBI). The Southern Nevada Health District's food regulations mirror the FDA Food Code, focusing on the control of FBI risk factors in permitted food establishments in Clark County. The five major risk factors include:

1. Poor Personal Hygiene

- Improper hand washing and/or not washing hands when necessary
- Bare hand contact with ready-to-eat foods
- Food service employees working while ill with symptoms, such as vomiting, diarrhea, sore throat with fever, jaundice, or infected cuts or burns on hands and wrists

2. Food from Unsafe Sources

- Food received from unapproved food sources and/or prepared in unpermitted locations
- Receipt of adulterated food

3. Improper Cooking Temperatures/Methods

- Cooking
- Reheating
- Freezing (kill step to eliminate parasites in fish)

4. Improper Holding, Time and Temperature

- Improper hot and cold holding of potentially hazardous food (PHF)

- Lack of date/time marking for ready-to-eat PHF/improper use of time as a control
- Improper cooling of PHF

5. Food Contamination

- Use of contaminated/improperly constructed equipment
- Poor employee practices
- Improper food storage/preparation
- Exposure to chemicals

Regulators and food service operators must work together to prevent foodborne illness in our community.

- The role of the health district is to provide for proper regulation, operator guidance and operator compliance evaluation.
- The role of operators is to provide for safe procedures, staff training, monitoring and corrective action in their facilities.

For documents illustrating how to control these risk factors in your food establishment, visit <http://www.southernnevadahealthdistrict.org/ferl/reducing-fbi-risk-factors.php>.

Additional Resources

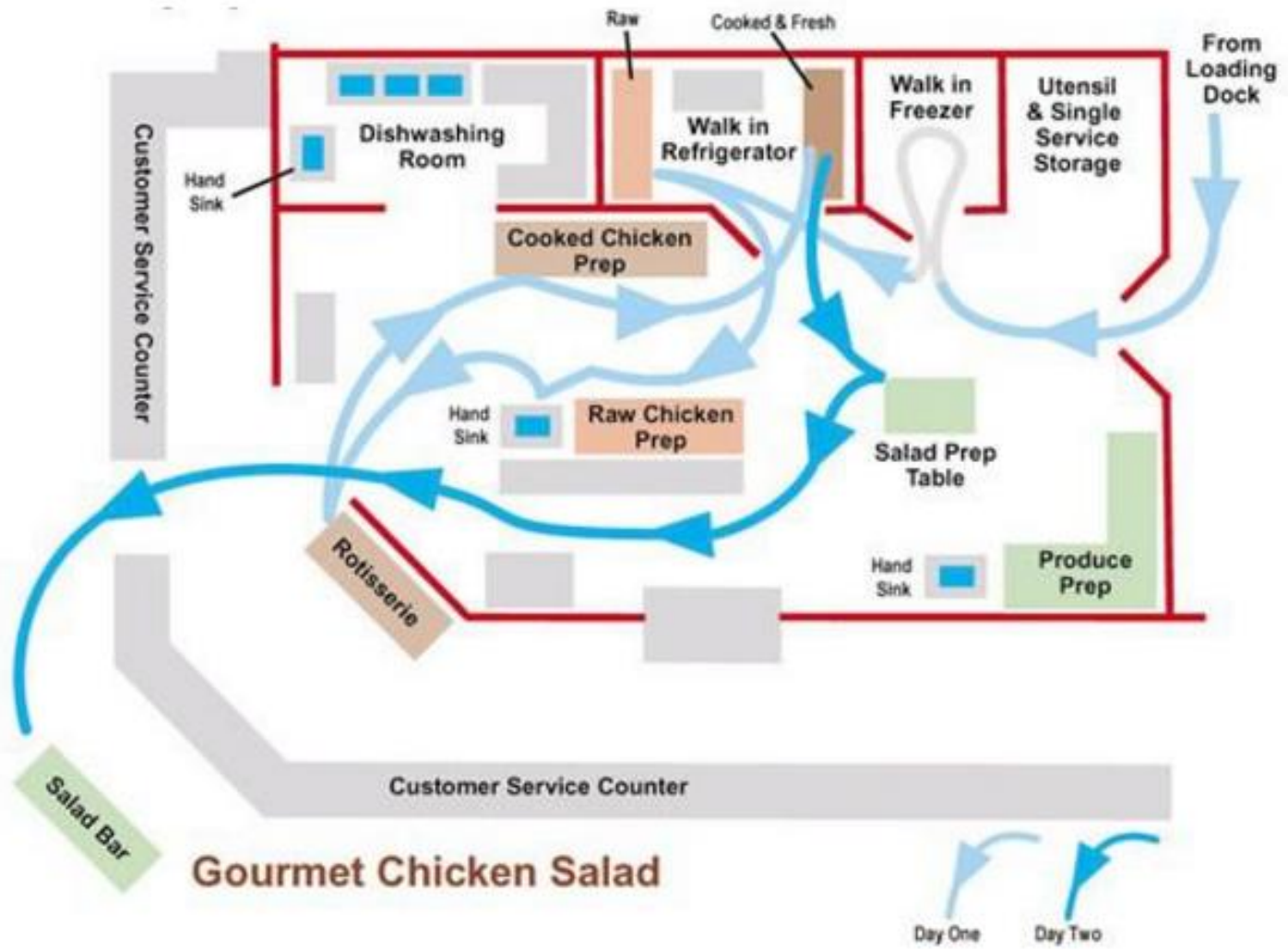
<http://www.southernnevadahealthdistrict.org/ferl/index.php>

<http://www.fda.gov/food/guidanceregulation/retailfoodprotection/foodcode/ucm188363.htm>

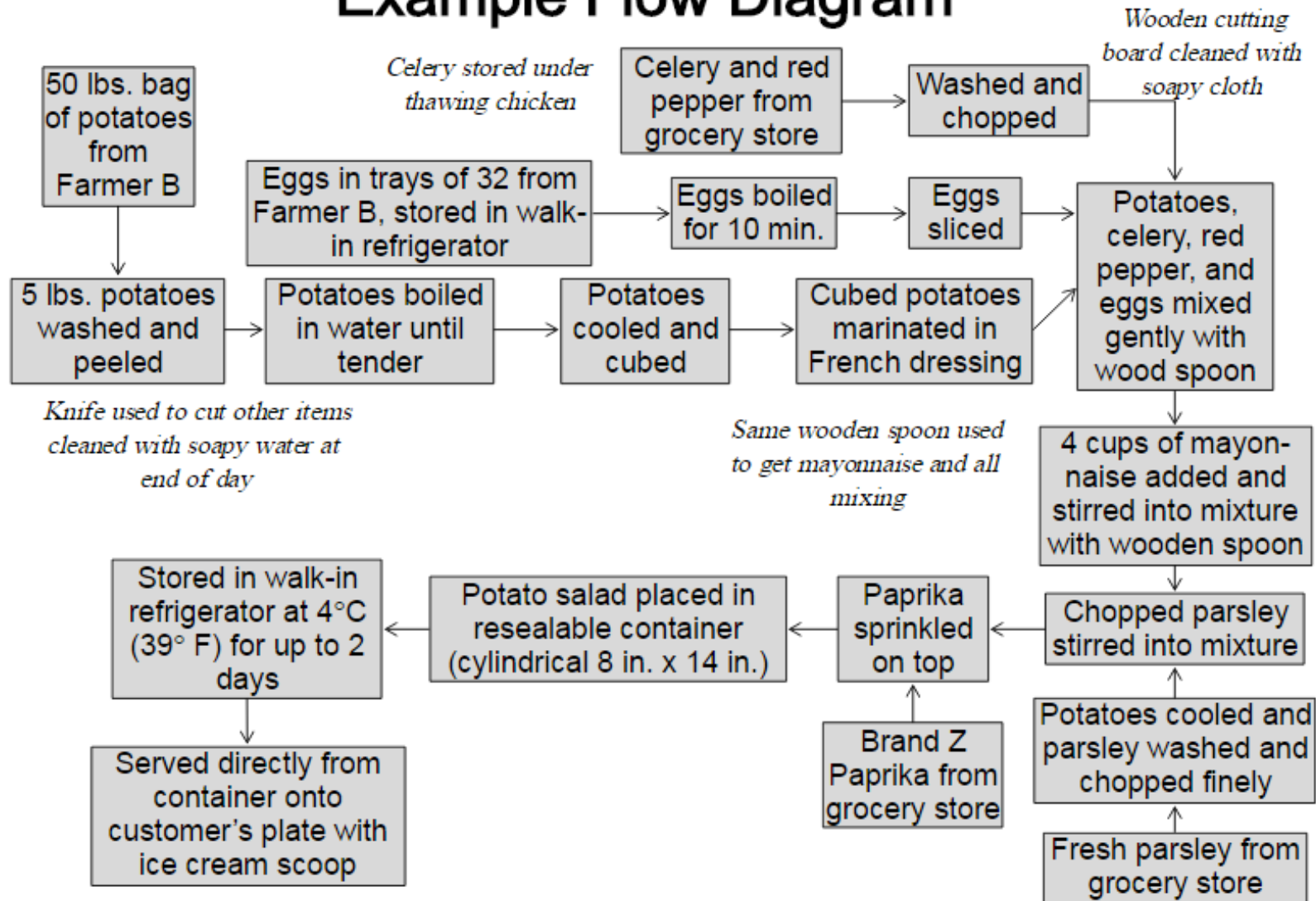
Food Item Focus

- Complaints show a common food item in common
 - Where is it prepped and stored?
 - Can you show me?
 - When is it usually prepped?
 - Who usually does it?
 - What else is going on in the kitchen at that time?
 - What equipment do you use? How is it cleaned?
 - Is that how it happened during the exposure period?
 - Do you have your invoices with receiving temperatures?

Example Food Flow through Facility



Example Flow Diagram



Risk Factor Focus

- Complaints lead us to a suspected pathogen that typically only occurs if there is a lapse in the control of a certain food safety risk factor

IAFP Charts

	Contamination				Holding/Storage				Processing				
	Cross Contamination	During Reconstitution	Improper Cleaning of Equipment	Worker/Person	Improper Hot Holding	Inadequate Refrigeration	Prolong Storage	Room/Outdoor Temperature Holding	Heat Process Failure	Improper Cooling	Inadequate Reheating	Organism/Toxin Survives Process	
Cooked, Pasteurized, and Other Heat Processes	Bacteria												
	<i>Bacillus anthracis</i>												X
	<i>Clostridium botulinum</i>					X		X		✓	✓	X	
	<i>Clostridium perfringens</i>	▲		▲	▲	X	X		X		X	X	X
	<i>Escherichia coli</i> STEC/VTEC	X		✓	▲	X	X		X	X	X	X	
	<i>Listeria monocytogenes</i>	▲		▲			✓	X	▲	✓	▲	▲	
	<i>Salmonella</i>	X		✓	▲	X	X		✓	X	X	X	
	<i>Staphylococcus aureus</i>	▲		▲	X	X	X		X	▲	X		X
	<i>Yersinia enterocolitica</i>	▲		▲			X		▲	X	✓	✓	
	Parasite												
	<i>Taenia</i> spp.									X			
	<i>Toxoplasma gondii</i>									X			
	<i>Trichinella spiralis</i>									X			
	Virus												
	Hepatitis A virus				X					X			
Norovirus	▲			X									

Review of Records

- Employee call out logs
 - So important: Do you know when your staff have foodborne illness symptoms? Are you tracking it?
- Internal food safety logs/checklists
 - Did anything unusual happen in the exposure period?
 - It's ok to write down that something went wrong!
 - Follow it up with how you handled it
 - Ex: Reach in cooler at 52F → Discarded PHF/TCS foods and removed cooler from service, repairperson called
- Food invoices and receipts
 - Make sure all vendors are approved sources

Our Goal

- Not:
 - Their sickness came from your restaurant
- Instead:
 - Identify ways that illness could POTENTIALLY spread and provide both immediate and long term corrections

Then What?

- Ideally,
 - No more reports of illness are received
 - That's the end of it
- Sometimes,
 - More reports are received
 - SNHD returns for a scheduled manager's interview
 - In depth conversation about policies, procedures, staff training, active managerial control



**Outbreak of Norovirus Infection
Among Diners of a Restaurant
Suspected to be Associated with
Food Servers Using Bare Hands
to Garnish Beverages
--Las Vegas, Nevada**

Public Health Investigation Report

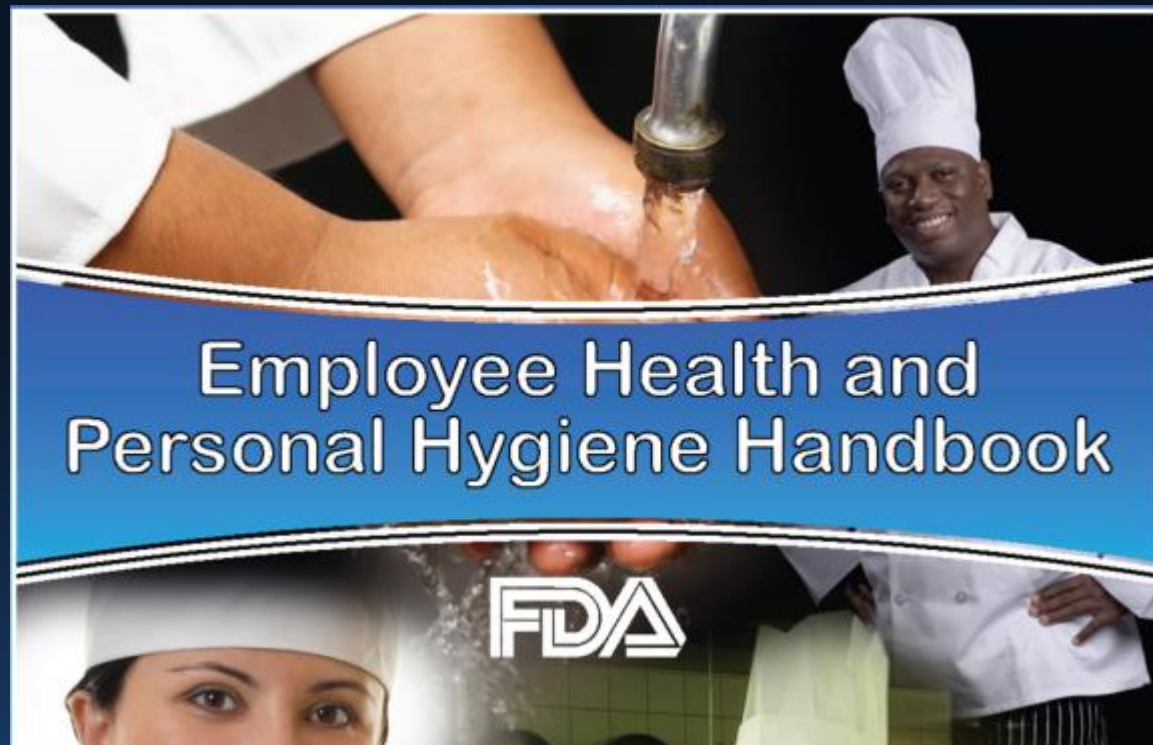


- Dozens of people ill with norovirus after consuming margaritas

admitted to pouring and serving drinks, and frequently placing garnishes (e.g. lemons, limes, and other fruits) into beverages prior to serving them to customers. Coupled with EH observations that employees handled ready-to-eat food using bare hands, the contamination of beverages with NoV could have occurred via infected worker(s) using bare hands to dispense or garnish beverages. Minimizing bare hand contact with ready-to-eat food is recommended as a mean of interrupting disease transmission [11].

Resources

- <https://www.fda.gov/Food/GuidanceRegulation/RetailFoodProtection/ucm266434.htm>



FOODBORNE ILLNESS FACTS

SINGLE KNOWN CAUSES OF FOODBORNE ILLNESS OUTBREAKS, U.S., 2009-2012



The top five germs that cause illnesses from food eaten in the United States are:



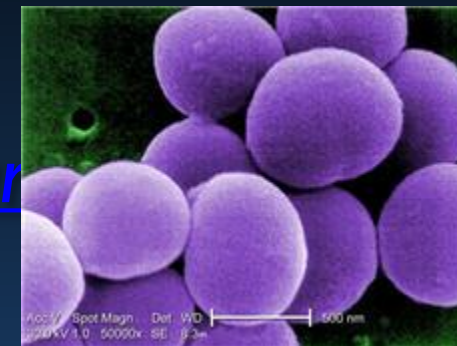
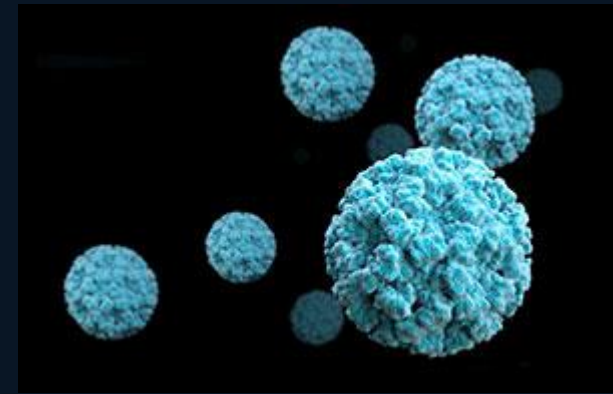
• Norovirus

Salmonella

Clostridium perfringens

• Campylobacter

• Staphylococcus aureus



Illnesses that are more likely to lead to hospitalization

- [Clostridium botulinum](#) (botulism)



- [Shiga toxin-producing Escherichia coli \(E. coli\) O157](#)



- [Listeria](#)



- [V](#)



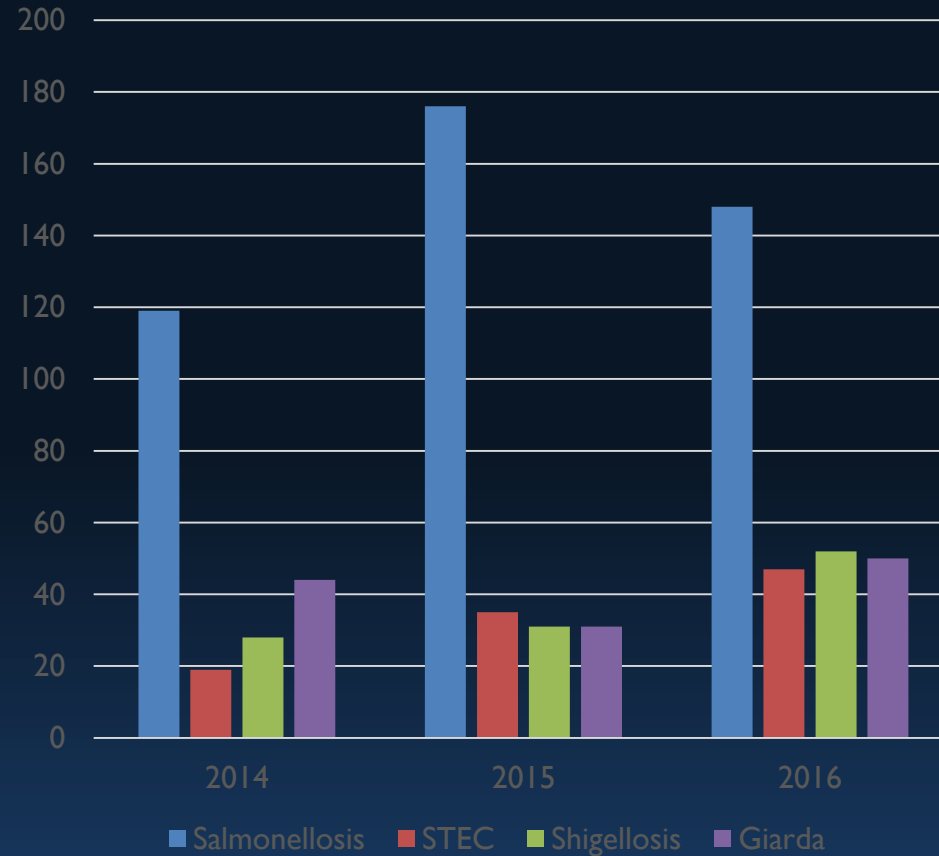
National Estimates per Year

Pathogen	Estimated # of Illness
Norovirus	5,461,731
<i>Salmonella, non-typhoid</i>	1,027,561
<i>Clostridium perfringens</i>	965,958
<i>Campylobacter spp.</i>	845,024
<i>Staphylococcus aureus</i>	241,148

Pathogen	Estimated # Hospitalized
<i>Salmonella, non-typhoid</i>	19,336
Norovirus	14,663
<i>Campylobacter spp.</i>	8,463
<i>Toxoplasma gondi</i>	4,428
<i>E. coli O175 (STEC)</i>	2,138

Clark County Disease Reports

Number of Cases Reported Over Time



NOTE: Statistics published on a monthly basis are provisional and subject to change

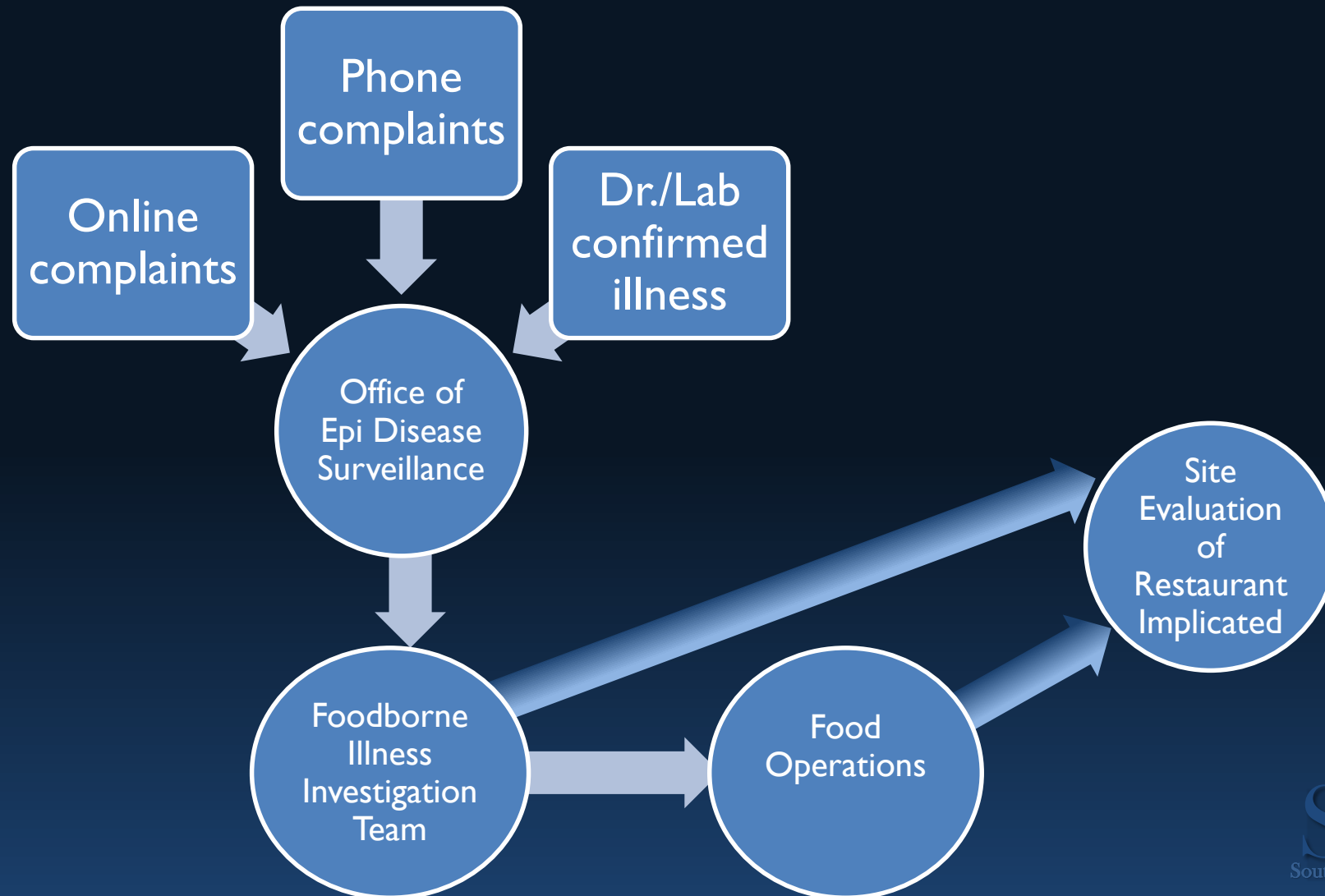
Hygiene * Undercooking * Contamination



Resources and Useful Links

- National Foodborne Disease Estimates
 - <https://www.cdc.gov/foodborneburden/2011-foodborne-estimates.html>
- Foodborne Illnesses and Germs
 - <https://www.cdc.gov/foodsafety/foodborne-germs.html>
- Disease Report Investigation Process
 - <https://www.southernnevadahealthdistrict.org/disease-reporting/disease-investigation.php>
- Online Morbidity Report Form
 - <https://www.southernnevadahealthdistrict.org/diseasereports/forms/disease-reporting>
- Disease Statistics (Monthly/Quarterly)
 - <https://southernnevadahealthdistrict.org/stats-reports/disease-statistics.php>

Summary



QUESTION

Q & A

