

Epi Report

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Physician's Resource Center Website

By Rod Norrish and Edward Diaz

The PIMA COUNTY HEALTH DEPARTMENT website (www.PimaHealth.org) now has a new feature designed for physicians' and other health care providers. Current information and forms for reporting communicable diseases is available on the site. Links to the Arizona Department of Health Services and CDC websites can be easily accessed from this site.

Updated reports on current communicable disease infections can be found in the Health Date and Statistics tab. Reports on the seasonal disease burden for Pima County can be found in the Epidemiology Report. Periodic reporting on the Health Status of Pima County residents will also be available. Articles from guest writers (physicians and other healthcare workers) addressing an epidemiology issue will periodically appear on the website.

Directions for accessing notices from the Health Alert Network are available.

Add this website to your "favorites" list for quick reference and easy access.

Please contact Francelli Lugo at telephone number (520) 243-7797 or by fax at (520) 791-0366 to update your current contact information.

The Holidays and Food Safety

By Renee Peyton

Parties, guests, and buffets go together during the holidays. However, handling foods with poor hygiene or leaving foods out buffet-style for long periods of time without temperature controls is like opening the door for uninvited guests, bacteria that can cause foodborne illness. The holidays are a time of sharing but foodborne illness shouldn't be one of the gifts. That is why it is a good idea to review the basics of food safety as we enter the holiday season. The USDA reminds consumers to practice the following four basic food safety steps:

- **Clean.** Wash hands and surfaces often.
- **Separate.** Separate raw meat, poultry, and egg products from cooked foods to avoid cross-contamination.
- **Cook.** Raw meat, poultry, and egg products need to be cooked thoroughly. Use a food thermometer to ensure foods have reached a high enough temperature to kill any harmful bacteria that may be present.
- **Chill.** Store leftovers within two hours of cooking.



Why are these basic guidelines so important? Consider the bacterial contamination that could occur.

Foodborne Bacteria

While the food supply in the United States is one of the safest in the world, the Centers for Disease Control estimates that each year 76 million cases of foodborne illness occur, more than 300,000 persons are hospitalized, and 5,000 die from foodborne illness. Every person may be at risk for a foodborne illness, however, those with a weakened immune system; young children, pregnant women, the elderly and those with chronic diseases are at the greatest risk.

There are more than 250 recognized foodborne diseases caused by bacteria, their toxins, viruses, parasites, and chemicals that have contaminated foods. Unlike microorganisms that cause food to spoil, harmful or pathogenic bacteria cannot be smelled or tasted. Three microorganisms that especially like to crash parties are *Staphylococcus aureus*, *Clostridium perfringens* and *Listeria monocytogene*. These microorganisms tend to frequent people's hands and steam tables.

Staphylococcus aureus

Staphylococcus ("staph") bacteria may be found on our skin, in infected cuts and pimples, and in our noses and throats and are spread by improper food handling. Basic prevention is two fold; washing hands and utensils before preparing and handling foods; and not letting prepared foods sit at room temperature more than two hours. Staph bacteria can be killed by thoroughly heating foods but staphylococcal enterotoxin is resistant to heat, refrigeration and freezing.

Clostridium perfringens

"*Perfringens*" or the "cafeteria germ" may be found in foods served in quantity and left for long periods of time with improper temperature controls. Prevention includes dividing large portions of cooked foods into smaller portions for serving and cooling. Keep cooked foods hot or cold, not lukewarm.

Listeria monocytogenes

Listeria bacteria can multiply slowly at refrigeration temperatures. These bacteria may be found in typical buffet cold foods. To avoid serving foods containing *Listeria*, follow "keep refrigerated" label directions, carefully observe "sell by" and "use by" dates on processed products, and thoroughly reheat frozen or refrigerated processed meat and poultry products before eating them.

It may take hours to days for symptoms of a foodborne illness to develop after eating contaminated food or drink. The length of the incubation period depends on what is involved and how much was ingested. Symptoms also vary but usually include nausea, vomiting, and diarrhea. Fever, exhaustion and headache may also occur. Symptoms can last two or three days and may improve without any medication. However, in cases of suspected illness a physician should be contacted.

The holidays should be enjoyed but a few nights of illness can quickly spoil the experience. With that in mind, please be mindful of the 4 basics of food safety; **clean, separate, cook, and chill**. Additional guidance from the FDA for food safety during the holidays can be found at the following website: <http://www.cfsan.fda.gov/~dms/fsholida.html>.



A Guide to Influenza Prevention

By Rod Frable and Anissa Taylor

Historically, the influenza season has been from October 1st to March 31st and starting on the East Coast and ending on the West Coast. Because of air travel this fact has changed. Influenza cases can be found year around and evenly distributed throughout the US. The influenza season peaks around February, with last years running over into March. Data is shared about the international, national, and local influenza status.

The Centers for Disease Control and Prevention (CDC) coordinates Influenza Sentinel Site Providers nation wide. Arizona Department of Health Services (ADHS) and Pima County Health Department (PCHD) coordinate state and local sentinel site providers under guidance from CDC. Pima County has 7 sites in the County, representing many geographic areas. These sites are responsible for reporting Influenza Like Illness (fever > 100 F [37.8 C] (oral or equivalent) and cough and/or sore throat (in the absence of a known cause other than influenza)) weekly along with there told patient load number in order to calculate a percentage.

During the influenza season, ADHS requests cultures of suspected influenza cases to be sent to the Arizona State Laboratory for typing (H3N2, H1N1, or B), not only from sentinel sites but from all health care providers. The first culture typed and confirmed at the state lab sets the stage for every rapid test that follows to be considered a positive influenza case. This data is then used to describe the influenza season for the Counties, States, and Nation.

CDC states that “the single best way to prevent against the flu is to get vaccinated each year.” There are two forms of the influenza vaccine; trivalent inactivated influenza vaccine (TIV) and the live attenuated influenza vaccine (LAIV). TIV is a dead virus delivered as an intramuscular injection; LAIV is taken through the nasal passage. Healthy persons ages 2-49 can receive LAIV while those 6 months to 2 years of age, pregnant women, people 50 yrs and older, residents of long term care facilities and those who have chronic medical conditions should only receive the TIV.

Vaccination of healthcare workers is important in protecting patients and visitors to the health care settings from contracting influenza as well. During the 2007-2008 influenza season there were a number of reported outbreaks in long term care facilities in Pima County which potentially put many of the residents at risk. In a letter dated October 23, 2008 to administrators of long term care facilities, Pima County Chief Medical Officer Dr. Michelle McDonald is encouraging employees of long term care facilities receive the influenza vaccination to reduce the chances of influenza related mortality of the residents because studies have shown its effectiveness in spite of vaccination of large numbers of patients.

CDC recommends other precautions to avoid influenza this season:

- Avoid close contact with people who are ill.
- Stay at home when sick.
- Cover mouth and nose with a tissue when sneezing or coughing.
- Wash hands often, avoid touching eyes, nose and mouth.
- Get an adequate amount of sleep, physical activity, fluids and healthy foods .

Remember, the single best way to prevent against the flu is to get vaccinated!

Additional information on influenza may be found at: <http://www.cdc.gov/flu/protect/keyfacts.htm>, <http://www.cdc.gov/flu/protect/habits.htm>, <http://www.pimahealth.org/disease/flu vaccine.html> and <http://www.cir.org/seasonal-flu-mollen.html>.

Summary of Selected Reportable Diseases for Pima County (Year to Date)

Enteric Diseases:	January-September 2008	January-September 2007
Amebiasis	3	1
Campylobacter	117	120
Shigella	78	68
Salmonella	159	168
Hepatitis A	11	21
Giardia	44	51
Vaccine Preventable Diseases:		
Pertussis	2	10
Measles	19	1
Mumps	0	0
Rubella	0	0
Tetanus	0	0
H. Influenzae, serotype b (<5 years of age)	0	0
Invasive Diseases:		
Streptococcus pneumoniae	152	129
Streptococcus Group A	21	42
Streptococcus Group B (in infants <90 days old)	9	6
MRSA	226	216
Diseases Involving Central Nervous System:		
Meningococcal Infection	2	4
Aseptic Meningitis	26	28
HIV & Sexually Transmitted Diseases:		
HIV	181	218
Chlamydia	2747	2746
Gonorrhea	369	494
Syphilis	134	147
Granulomatous Infections:		
Tuberculosis	19	31
Coccidioidomycosis	556	590
Vector-Borne & Zoonotic Diseases:		
West Nile Virus	9	5
Animal Rabies	50	71

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HIV and STD data provided by Pima County Health Department, HIV/STD Program.

Animal Rabies data provided by Arizona Department of Health Services.

Statistical data for the years 2007 and 2008 reflect communicable disease reports of confirmed, probable, and suspect cases received via the Medical Electronic Disease Surveillance Intelligence System (MEDSIS) from 01/01/2007 to 09/30/2007 and 01/01/2008 to 09/30/2008 respectively. Data are provisional. Cases from 2008 may still be under investigation. Report generated on 11/05/2008.