West Virginia Association of Sanitarians

Sanitarian's Newsletter

Volume 97 Issue 1

April, 1997

WVAS OFFICERS

President
Stanley Mills, R.S.

President Elect
Joe Wyatt, R.S.

Immediate Past President
Gary Epling, R.S.

Vice President
Twila Carr, R.S.

Secretary, Treasurer
Lee Thompson, R.S.

Member at Large
Lloyd White, R.S.

Member at Large
Joe Golebiewski, R.S.

Member at Large
Dave Thornton, R.S.

THIS IS YOUR NEWSLETTER, GIVE US YOUR INPUT!

The Sanitarian's Newsletter is a publication of the West Virginia Association of Sanitarians. Articles printed are not necessarily the views of the WVAS. The Sanitarian's Newsletter is meant to facilitate communication between the members of the Association. For that reason, we are genuinely interested in your input. Without it, we become a forum of the few. We want to know the thoughts and ideas of all our members.

Editorials and Articles may be submitted to any of the contributing editors, or sent directly to:
Sanitarian's News, *C/O Don Bloss, MOVHD, P.O. Box 33, Grantsville, WV 26147.*
e-mail grayson@citynet.net

WVAS Sanitarian's News Editors:

Jolene Zuros, R.S.
Barbara Wollman, S.I.T.
Karol Wallingford, R.S.
Lisa Dunn, R.S.
Don Bloss, R.S.
Art Adams, R.S.

Woman Bitten on Back of Leg- Hathaway Gets Squirrely

by Art Adams

Monongalia County Health Department (MCHD) Sanitarian John Hathaway investigated what he thought was a routine animal bite.

The saga began when a woman was bitten on the back of her leg by a squirrel in a local sports shop. The squirrel was a pet, hand raised by a fellow who set and splinted the squirrel's broken leg when it was a pup. The squirrel limped but was otherwise fine and accompanied him everywhere, including to the sports shop.

The fellow was a WVU student with a Virginia address so John had to work through the Virginia Health Department system to find his local address in Morgantown, naturally with no phone.

Following procedure, John confiscated the cute, little, limping squirrel and took it to the dog pound to be put down for rabies testing. The squirrel was adorable and quickly made friends with the pound staff and the county veterinarian.

Peanuts were his passion. The vet refused to put the animal down because there was so little risk. His position was that if a wild squirrel had bitten the woman and escaped, the health department would not have recommended anti-rabies treatment because of the minimal risk. Additionally, since it was a tame squirrel, raised by hand, never loose outside, and showing no signs of rabies ten days after the bite, there was little justification for putting it down.

There was even concern that the ADA (Animals with Disabilities Act) had a good case and would petition for relief on behalf of the squirrel.

But, more importantly than anything else, it didn't hurt that the squirrel continued limping around, acting so cute that everyone loved it.

John dutifully attempted to follow procedure even though he was also taken in by the squirrel. A final appeal was made directly with the CDC and believe it or not, they supported not killing the squirrel. It was returned, limping, to its sobbing owner, ever grateful for the stay of execution.

The last account of the squirrel was that he was still limping, eating peanuts, and getting fat. Rumor has it that a movie portraying the squirrel as the oppressed animal, the county vet as the hero, and John as the villain may soon be in the works.

SANITARIAN PRIDE

by Michelle Cochran

How often have you heard fellow Sanitarians complain that our efforts go largely unnoticed? Let's face it, most sanitarians feel they are under paid and unappreciated.

I have been asked to track sanitarian recognition, in all forms, for our newsletter. I hope that with Public Health Awareness Week having just passed, that you took the opportunity to make your community aware of how important you are to them by revealing the range of your job duties....Toot your own horn!

MEDICAL WASTE TEAM CAPTURES COCHRAN

by Mark Whittaker

Ron Forren recently announced that **Michelle Cochran, R.S.,** Fairmont District Office, has transferred to the Public Health Sanitation Division from the Radiation, Toxics and Indoor Air Division. Michelle's primary responsibilities are in the Infectious Medical Waste Program and she also assists Mark Whittaker with FDA contract work and institution inspections. She continues to work from her Fairmont office.

Michelle wants us to know that she is no longer involved in asbestos and that calls involving asbestos should be referred to the Charleston number 304 558-2981. If we encounter medical waste spills, illegal dumping of medical waste, etc., we should contact her at the Fairmont District office (367-2753.) If Michelle is not available, call Joe Wyatt at the Central Office.

Note: **Mark Whittaker** has a list of phone numbers for disposal sites for waste tires!

SANITARIANS AND THE INTERNET

Submitted by Mike Trantham
e-mail mtrantha@wvu.edu

WVU's Department of Environmental Health and Safety's Sanitarians utilize the Internet to access the World Wide Web and exchange information concerning safety and health with other safety specialists world wide. Two very useful e-mail mailing lists concerning food safety and HACCP can be accessed by sending an e-mail message to:

1. FOODSAFE MAILING LIST

Send an e-mail message to *majordomo@nal.usda.gov* with the following command in your e-mail message;

subscribe foodsafe <your e-mail address>

2. HACCP mailing list (HACCP System for Retail Food Safety) by Michael Plagens

Send an e-mail message to *LISTSERV@LISTSERV.ARIZONA.EDU* and in the body of the message enter the following command;

subscribe haccp <your name>

E-MAIL ADDRESS REQUEST

Submitted by Twila Carr

Francis Holton, R.S., is interested in contacting other Sanitarians and Public Health workers who have e-mail available to them. He has asked that we send our e-ddresses to him C/O the Lincoln County Health Department, P.O. Box 527, Hamlin, WV 25523. Alternatively, e-mail Don Bloss at grayson@citynet.net and he'll forward your e-dress to Francis.

Francis is also interested in knowing how many of us are utilizing the CDC Wonder Program. I've to be really useful a couple of times.

Not only does Wonder give access to a number of databases relating to Public Health, such as Morbidity and Mortality figures on reportable diseases, AIDS statistics, smoking related illness, and accident data, but it also offers access to publications, articles and reports dealing with virtually every aspect of public health. Wonder also provides no charge E-mail services for its subscribers. I've used this feature several times to correspond with other sanitarians to ask how they have handled a situation that I might be facing. Since Wonder is accessed through an "800" number, and there is no charge for the service, once you are a subscriber, communicating this way is very cost effective.

BERKELEY COUNTY NEWS

by Twila Stowers Carr, R.S.

"If you can't beat um, join um." That's what the Berkeley County Health Department recommends when bad publicity comes from a higher authority. So we are taking our problems to Charleston for Public Health Day at the Legislature. With the help of Shepherd College's Promotion and Public Relations Class, we plan a grand display. We hope to show our problems and tell why we are following the regulations "By the book."

Twelve fourth graders will accompany the display to show off their computer knowledge on the "Wellness Web" and to help promote the Berkeley County Health Department. They will also act as Pages for the House and Senate. **Twila Carr** and **Tom Koontz** will act as chaperones? Twila and Tom hope to receive a grand tour of the Capitol, the Governor's Mansion, and the State Health Department since they don't often get to leave home for social events.

On the lighter side, computer jokes are the "in thing" this year. We hope you enjoy these.

"Hard drive" Trying to climb a steep, muddy hill with 3 flat tires and pulling a trailer load of fertilizer.

"Keyboard" Place to hang your truck keys.

"Window" Place in the truck to hang your guns.

"Floppy" When you run out of Polygrip.

"Modem" How you got rid of your dandelions.

"ROM" -- Delicious when you mix it with coca cola.

"Byte" First word in a kiss-off phrase.

"Reboot" What you do when the first pair gets covered with barnyard stuff.

"Network" Activity meant to provide bait for your trout line.

"Mouse" Fuzzy, soft thing you stuff in your beer bottle in order to get a free case.

THEY MADE THE GRADE

By Anita Ray

The West Virginia Board of Registration for Sanitarians would like to recognize the following insividuals who have received their certificaiton as a Ragistered Sanitarian (R.S.) by successfully completing the P.E.S. exam and meeting all other necessary requirements.

Don Bloss - Mid-Ohio Valley

Jeffrey Fowler - Mason County

Jimmie Kinder - Hampshire County

Thomas Koontz - Berkley County

Magda Knott - Mid-Ohio Valley

Julia Lovisa - Cabel Huntington

Penny Mangold - Upshur County

Linda Smithson - Mercer County

Congratulations are in order for these individuals!

from the Charleston Daily Mail...

NEW PASTEURIZED EGGS ELIMINATE SALMONELLA CONCERNS

by Lisa Dunn, R.S.
The following is a news release from Crystal Farms.

Minnesota will be the first state in the nation to benefit from a new food safety breakthrough that promises to remove the taboo from a host of favorite foods. Crystal Farms is introducing the nation's first fresh eggs to be pasteurized in the shell. The pasteurized eggs are the same as ordinary shell eggs with one important difference: they're free of Salmonella. Crystal Farms Pasteurized Eggs are a product of Minneapolis-based Michael Foods.

Salmonella is the leading cause of foodborne illness in the United States. While improper cooking and handling of poultry has long been identified as the primary cause of Salmonella-related food poisoning, research has shown that uncooked or undercooked eggs can also carry the illness-causing bacteria. The U.S. Food and Drug Administration added eggs to its list of potential food safety hazards in August 1990 and has discouraged people from eating dishes in which eggs are eaten raw or only partially cooked, such as eggs fried "sunny-side up," soft-boiled eggs, raw cookie dough and Caesar salad dressing.

"By perfecting a pasteurization process that eliminates Salmonella without changing the flavor or cooking properties of the eggs, we're enabling Minnesotans to put those foods back on the menu and to enjoy an added measure of safety anytime they eat or cook with eggs," said Dr. Hershell Ball, vice president of research and development at M. G. Waldbaum Company, a subsidiary of Michael Foods.

The only difference that consumers will notice in cooking with pasteurized eggs are that the whites of pasteurized eggs are slightly cloudy in appearance and that it takes longer to beat pasteurized egg whites to stiff peaks as called for in meringues, chiffons and souffles. "These minor differences are both the result of the gentle heating used in the pasteurization process and in no way affect the finished appearance, flavor, texture or overall quality of dishes made with pasteurized eggs." said Ball.

A former food science professor at North Carolina State University and an expert in pasteurization technology, Ball worked closely with outside research organizations in developing the new pasteurization process. They have applied for a patent on the process, which begins with very fresh (less than 48 hours old) Grade AA large eggs that are carefully washed and sorted. The eggs are then placed on shelves in a large holding tank which is sealed and filled with heated water. The temperature of the water is carefully maintained for an exact length of time. The water is drained and the eggs are then cooled and rinsed prior to packaging.

"It's really a very simple process," said Ball. "The challenge was in determining the exact combination of time and temperature required to effectively eliminate Salmonella without affecting the taste, nutritional value or cooking performance of the eggs."

One benefit of the simplicity of the process is that no additives or chemicals are used. "Consumers are increasingly concerned about what goes into the foods they eat," said Bill McGrath, vice president of marketing at Michael Foods. "One of the reasons we worked so hard to develop a simple heat pasteurization process is that we wanted to give consumers the benefits of in-the-shell pasteurization without giving them any cause for concern about additives or chemicals. What these eggs offer consumers is all of the taste, quality and cooking options they've come to expect from shell eggs, without the safety concerns."

Further evidence of the company's sensitivity to consumer preference can be found in the way the pasteurized eggs are packaged. "By using a clear plastic carton that is sealed with shrink-wrap, we're able to give consumers an added measure of food safety while still allowing them to visually inspect the eggs before they buy," said McGrath. "We also print the word 'pasteurized' and a stylized 'P' on each egg so consumers are able to identify pasteurized eggs even when they're out of the package."

Note: The pasteurized eggs, which are being sold under the Crystal Farms brand name, were made available throughout Minnesota last April. The eggs are available only in a "large" size and have a suggested retail price of $1.39 per dozen.

NEWS FROM JEFFERSON COUNTY

by Lisa Dunn, R.S.

The sanitarians in Jefferson County have kept busy over the past few months. Even though it has officially been winter, the weather has actually been the best we've seen in months. This has precipitated a lot of new construction which in our county means new wells and septic systems. In the month of January, I personally set an all time record for this month of 18 final inspections and I am only responsible for approximately one third of the county, geographically speaking.

We are now in phase two or our radon program. While we are continuing to educate the public about radon through the display we created, we are now doing some testing in the homes. Hopefully by the end of the physical year we will be able to tabulate the data and chart it on a map to see if there are any real "hot spots" in the county.

I have spent the last month preparing for our annual retail food store worker educational conference. This year's theme is Salmonella. **Brandi Shultz** who is our local Department of Agriculture inspector has graciously accepted my invitation to speak to the groups.

New stores continue to open and expand in Jefferson County. This year we saw the opening of Martins which is a large chain store employing over 175 people. A small warehouse store called Save-A-Lot also opened just last month and both of the Food Lions in the county added deli/bakeries to their stores this year. Next to open will be a Super Wal-Mart which has already begun construction and plans to be open by the end of this year.

Randy DeHaven has been working hard with **Max Fisher** to tidy up the new onsite sewage disposal rules and design standards. Seems that there was a chance to get them emergency filed in the legislature this session and Max jumped at the opportunity.

We have been working for the past several weeks with **Katherine Dunbar** of the local chapter of the American Red Cross. They are co-sponsoring an Open House here at the Health Department on April 10th during Public Health Week. Plans for the open house include tours of the facility, displays on radon, blood donations, and a display showing all the services offered by this department.

We are also having mini seminars throughout the day. These include discussions on E. coli and food safety for the picnic season, how to donate blood, CPR instruction, and how to handle a chemical disaster. Our goal for this year's open house is to have a larger attendance than last year. This will be the third year we have held the open house during public health week and each year it keeps getting bigger and better.

Just off the MTV news wire is that there will be another Lollapalooza tour this year and they have signed Snoop Doggy Dog as one of the headliners. No word yet as to where the concert locations will be but I bet they'll stop in Charles Town again. If they do, we are always looking for any willing volunteers to help out the day of the concert. It's a lot of work but I guarantee you it will be an experience you'll never forget. Anyone interested in helping out please contact Judi Rice at (304) 728-8415.

NEWS FROM THE SOUTH

by Barbara Wollman

An in-service Training Meeting was held on Friday, March 14, 1997 at the Flowers Baking Company, Bluewell, West Virginia. The McDowell County Environmental Health staff served as hosts.

Topics included a tour of the bakery, **Holli Smith**, of the State Education Council, who spoke on Clean Air, **Jay Davidson** who spoke on the Norweco Home Aeration System and Richard Peggs who discussed Lead Hazard Awareness.

Sam Argento, Nicholas County hosted a one day seminar on April 18, 1997, with an on-site demonstration of the new Eljen Drain System.

MERCER COUNTY TAKES A STEP BACKWARDS.

by Stanley Wails

At the December 12, 1996, meeting of the Mercer County Board of Health, the Board voted 4 to 3 to amend the Mercer County Clean Indoor Air Regulation. These amendments would allow for any restaurant, bowing alley, beauty parlor or barber shop to declare their establishment as a smoking facility and would allow smoking in waiting areas and lobbies.

These amendments were proposed by a new Board member that owns a small restaurant that had legal action pending against him for violating the existing regulation. Other new members backed this effort even though the general public had sent many letters supporting the existing regulation and had appeared before the Board to request that the regulation not be changed.

Since this action was taken there have been letters to the editor almost on a daily basis criticizing the Board's action to amend the Clean Indoor Air Regulation and stating that it is the Board's responsibility to protect the pubic health from known health hazards.

NFSD: Foodborne Contaminants: Botulism

by Pat Kendall
Submitted by Clarence Christian

Four classifications currently are used in the United States to discuss botulism in humans. These are 1) food-borne botulism, caused by consuming food containing botulinal toxin 2) infant botulism, caused by production of botulinal toxin after germination and growth of the spores within the infant's intestines; 3) wound botulism, resulting from germination and growth of Clostridium botulinum within a wound; 4) undetermined botulism, occurring in people older than 12 months, in which no food or wound is implicated.

The majority of reported cases of botulism traditionally have been food-borne in nature. Between 1970 and 1988 an average of 11 outbreaks involving around 30 cases have been reported per year.

Infant botulism was first recognized in 1976. Seventy cases were reported in 1985, 79 in 1986, 59 in 1987, and 50 in 1988. The age range has been 22 days to 14 months.

Although the possibility of wound botulism was recognized as early as 1920, no actual cases were reported until 1943. Since 1950, some 30 cases have been reported.

QUICK FACTS

There are four classifications of botulism in humans in the United States.

The majority of reported cases of botulism have traditionally been food-borne in nature.

Cases of infant botulism have been identified with increasing frequency.

There currently are seven known types of Clostridium botulinum bacteria.

Conditions that favor growth and toxin production by Clostridium botulinum include a relatively high-moisture, low-salt, low-acid (pH greater than 4.6) environment in which food is stored without oxygen or refrigeration (above 38deg.;F) Anaerobic conditions can develop in canned foods, smoked fish, sausages and some cooked foods.

Botulism can be controlled in home-canned foods if home canners are made aware of the dangers and how to prevent them.

THE BOTULISM ORGANISM

Currently there are seven known types of Clostridium botulinum bacteria. These differ in such characteristics as proteolytic activity, tolerance to salt and water activity, minimum growth temperature and resistance to destruction by heat.

The proteolytic type A, B and F strains produce very heat-resistant spores that are a major concern in the processing of low-acid foods. These types digest proteins in foods and produce a foul odor that may warn consumers of spoilage.

The nonproteolytic type B, E and F strains can grow at refrigerated temperatures, but produce spores of very low heat resistance. These types cause problems primarily in pasteurized or unheated foods. Because they are nonproteolytic, no off-odor or evidence of spoilage may be produced with toxin development.

Type C strains cause botulism in birds, turtles, cattle, sheep and horses. Type D is associated with forage poisoning of cattle and sheep in Australia and South Africa. No outbreaks of type G have been reported; however, type G has been isolated in cases of sudden and unexpected death in humans.

Inactive Clostridium botulinum spores are found in soil and water throughout the world. In the spore form, these bacteria are relatively harmless. The problem occurs when the spores germinate into vegetative or actively growing cells. As the vegetative cells grow they become overpopulated and begin to die. As they do, they produce the deadly neurotoxin that causes botulism.

Type A toxin is more lethal than types B and E. The toxin is a protein that can be inactivated by heating at 180deg.F (80deg.C) for 10 minutes. The toxin can be absorbed into the blood stream through the respiratory mucous membranes as well as through the wall of the stomach and intestine.

Several conditions must be present for the germination and growth of Clostridium botulinum spores. Acid level is a primary factor. Acidity is measured on a pH scale of 0 to 14 with 7 considered neutral, 0 to 7 acidic and 7 to 14 alkaline. A pH near 7 or neutral favors the growth of Clostridium botulinum, while growth is inhibited at a pH of 4.6 or lower. the pH of a food also has an influence on the amount of heat necessary to kill the spores of Clostridium botulinum. The higher the pH (lower the acid level), the greater the amount of heat needed to kill the spores.

A second important factor affecting the growth and toxin production of Clostridium botulinum is temperature. Proteolytic types grow between temperatures of 55 deg. and 122deg.F, Nonproteolytic types grow between 38deg. and 113deg.F, with an optimum for growth and toxin production at about 86deg.F). For these types, refrigeration above 38deg.F (3.3deg.C) may not be a complete safeguard against botulism.

Another important condition affecting the growth of Clostridium botulinum is the presence of oxygen. These organisms can't grow if air or free oxygen is present in their microenvironment (the area immediately next to them). This area is so small that it is not readily observed. Therefore, it is possible to have conditions develop in a food system or wound whereby it appears that lots of air is available, but in reality there are areas such as Clostridium botulinum, can develop. Anaerobic conditions develop when food is canned. Clostridium botulinum, the spores will germinate and grow during subsequent storage of food.

Canning is not the only condition in the manufacture and preservation of foods in which anaerobic conditions can develop. Smoked fish can develop anaerobic conditions in the visceral cavity and under the skin. The interior of sausage also may become anaerobic during the preservation process. Anaerobic conditions capable of supporting the growth of C. botulinum also have developed in such foods as foil-wrapped baked potatoes, sauteed onions, turkey loaves, meat stews and pot pies left at room temperature or in a warming oven overnight. In these cases the original baking killed competing organisms and eliminated much of the oxygen. In the micro-environment under the crust, foil or buttery coating. Subsequent storage at warm temperatures created an ideal environment for the germination and growth of botulinum spores. For these types of foods, growth of Clostridium botulinum is inhibited by storage at a low temperature (below 38deg.;F or 3.3deg.;C) and/or the use of a preservative, such as sodium nitrite.

FOOD-BORNE BOTULISM

Food-borne botulism was first identified in Europe during the 1800s as a problem in sausages. The sausages probably were slightly preserved with salt and smoke. Refrigeration was nonexistent or dependent on seasons of the year. Because of the great problem with sausages, the disease was named botulism after the Latin word for sausage, botulus.

In the 1900s, refrigeration practices improved and sausages no longer caused a major problem with botulism. However, at this same time, the technology and containers of canning became available. Almost immediately, botulism became a problem in canned foods. By 1926, most of the problems in the commercial canning industry had been solved. Since that time, most of the outbreaks of food-borne botulism in the United States have been caused by improperly home-canned foods, mostly fish and vegetables, such as string beans, corn, beets, spinach, asparagus and chili peppers.

Although low-acid vegetables and fish have been the chief culprits, tomatoes, tomato-based mixtures and such fruits as figs, apricots, pears, peaches, applesauce, persimmons and mangoes also have been involved. In some of these cases inadequate processing permitted the growth of molds, yeasts or bacteria, which in turn raised the pH of the food sufficiently to permit the growth of C. botulinum. In some of these cases, molds or bacteria grew due to poor processing and reduced acidity. In others, reduced acidity may have been due to differences in variety or in the degree of ripeness, pointing up the fact that overripe tomatoes and fruits should not be selected for home canning. With fruits, the syrup added before processing does not become acidic until acid diffuses out of the food. This may take some time if the fruit is not heated (processed) enough.

Symptoms of food-borne botulism usually appear within 12 to 72 hours after the contaminated food is eaten, but the time can vary from six hours to eight days. The most significant symptoms are blurred double vision and difficulty in swallowing and speaking. Fever is absent early in the disease.

For some types of the disease, early symptoms may be gastrointestinal in nature (nausea, vomiting, abdominal pain, constipation, cramps, headache, fullness) and lead to a false diagnosis of appendicitis, bowel obstruction or heart attack.

Ordinary bacterial food poisoning (rarely fatal and due mainly to toxin from staphylococcus or infection with Clostridium botulinum or salmonella) causes gastrointestinal symptoms, but not such symptoms as impaired vision, speech and swallowing.

Unless treatment of food-borne botulism is initiated promptly at the onset of the symptoms, death may result within three to seven days. Improved detection methods and the ready availability of antitoxins have reduced the high death rate to around 10 percent in recent years.

Treatment of food-borne botulism consists primarily of 1) removing any unabsorbed toxin in the digestive tract, 2) neutralizing the circulating toxin with an antitoxin as quickly as possible, and 3) keeping a patient breathing by a mechanical respirator (iron lung) as necessary. Recovery may take several weeks to months.

INFANT BOTULISM

Unlike food-borne botulism, which is caused by ingestion of pre-formed botulinal toxin, infant botulism is presumed to be caused by ingestion of viable spores that later grow and produce toxin in susceptible infants, mostly under 6 to 8 months of age. Because C. Botulinum spores are found in the soil everywhere, the probability of ingesting the spores from garden soil, dust in the air, and such sources as vacuum cleaner dust is quite high. The only food items thus far associated with cases of infant botulism have been honey and corn syrup, although the possibility exists for contamination with the spores from any raw or unprocessed food, especially if it has not been carefully washed.

Symptoms of infant botulism include constipation, followed by general weakness, feeding and swallowing problems, weak or altered cry, loss of motor tone and poor head control. The syndrome can evolve in anywhere from six hours to one week or more and ranges in severity from no more than minimal constipation to sudden death. In cases of the latter, infant botulism is thought to account for at least some of the reported cases of Sudden Infant Death Syndrome.

Treatment of infant botulism is somewhat different than that of food-borne botulism. Antitoxin generally is not used because of potentially hazardous side effects on young infants. Rather, comprehensive supportive care in the hospital for the course of the disease, usually three to four weeks, is the usual treatment.

PREVENTION

Food-borne botulism can be controlled if consumers are aware of the dangers and take steps to prevent spoilage in home-canned and home-cooked foods. Here are some important tips to remember.

Clean foods well before cooking or processing. This reduces but does not remove all bacteria. Bacteria are still present in nearly every pint or unit of food cooked or canned.

Be sure all home canning methods are up-to-date with current research-based recommendations and are properly adjusted for altitude.

Process all home-canned meats and vegetables, with the possible exception of tomatoes, in a steam pressure canner at 240deg.F (115.6deg.C) for the time recommended

Acid foods, such as tomatoes and fruits, if properly selected and processed, do not support the growth of Clostridium botulinum and may be canned in a boiling water bath if current, research-based instructions are followed. The addition of acid in the form of lemon juice or citric acid is recommended in all tomato products canned in a boiling water bath as a precautionary measure.

Before using home-canned food, critically examine the product and container. A bulging lid or leaking jar are signs of spoilage. When you open the jar, look for other signs of spoilage such as spurting liquid, an off-odor or mold.

As an added precaution, boil all home-canned vegetables and meats without tasting for 10 minutes plus one minute per 1000 feet above sea level (15 minutes at 5000 feet). boil home-canned spinach and corn 20 minutes before tasting. If the food looks spoiled, foams or has an off-odor during heating, discard it.

Dispose of all spoiled food in a place where it will not be eaten by children or pets. One sure way to prevent the spread of toxin is to boil suspect foods 30 minutes before disposing. This will assure destruction of any toxin that might be present and prevent its spread.

Colorado State University Cooperative Extension.

ACTUAL BUMPER STICKERS

Submitted by Clarence Christian

THE GENE POOL COULD USE A LITTLE CHLORINE.

TIME IS WHAT KEEPS THINGS FROM HAPPENING ALL AT ONCE

I DIDN'T FIGHT MY WAY TO THE TOP OF THE FOOD CHAIN TO BE A VEGETARIAN.

WOMEN WHO SEEK TO BE EQUAL WITH MEN LACK AMBITION.

YOUR KID MAY BE AN HONOR STUDENT BUT YOU'RE STILL AN IDIOT

IF WE AREN'T SUPPOSED TO EAT ANIMALS, WHY ARE THEY MADE WITH MEAT?

FEW WOMEN ADMIT THEIR AGE, FEW MEN ACT IT.

I DON'T SUFFER FROM INSANITY, I ENJOY EVERY MINUTE OF IT.

IT'S LONELY AT THE TOP, BUT YOU EAT BETTER.

LOVE: TWO VOWELS, TWO CONSONANTS, TWO FOOLS.

ACCORDING TO MY CALCULATIONS THE PROBLEM DOESN'T EXIST.

SOME PEOPLE ARE ALIVE ONLY BECAUSE IT IS ILLEGAL TO KILL THEM.

PRIDE IS WHAT WE HAVE. PITY IS WHAT OTHERS HAVE.

FORGET ABOUT WORLD PEACE...VISUALIZE USING YOUR TURN SIGNAL.

WARNING: DATES ON CALENDAR ARE CLOSER THAN THEY APPEAR.

GIVE ME AMBIGUITY OR GIVE ME SOMETHING ELSE.

WE HAVE ENOUGH YOUTH, HOW ABOUT A FOUNTAIN OF "SMART."

MAKE IT IDIOT PROOF AND SOMEONE WILL MAKE A BETTER IDIOT.

HE WHO LAUGHS LAST THINKS SLOWEST.

ALWAYS REMEMBER YOU'RE UNIQUE, JUST LIKE EVERYONE ELSE.

LOTTERY: A TAX ON PEOPLE WHO ARE BAD AT MATH.

VERY FUNNY SCOTTY. NOW BEAM DOWN MY CLOTHES.

PURITANISM: THE HAUNTING FEAR THAT SOMEONE, SOMEWHERE MAY BE HAPPY.

CONSCIOUSNESS: THAT ANNOYING TIME BETWEEN NAPS.

WE ARE MICROSOFT. RESISTANCE IS FUTILE. YOU WILL BE ASSIMILATED.

3 KINDS OF PEOPLE: THOSE WHO CAN COUNT AND THOSE WHO CAN'T.

WHY IS "ABBREVIATION" SUCH A LONG WORD?

EVER STOP TO THINK, AND FORGET TO START AGAIN?

DIPLOMACY IS THE ART OF SAYING "NICE DOGGIE!"...TILL YOU CAN FIND A ROCK.

I LIKE YOU BUT I WOULDN'T WANT TO SEE YOU WORKING WITH SUB-ATOMIC PARTICLES.

"AUNTIE EM: HATE YOU, HATE KANSAS, TAKING THE DOG." -DOROTHY.

NEWS FROM THE NORTHERN PANHANDLE

Submitted by Jolene Zuros

The September, 1996 Tri-State Environmental Health Association meeting was hosted by Stan Georgiafandis. The morning program was a presentation by **Mr. Ed Argentine,** Assistant to the Director of North Ohio Valley Air Authority (NOVAA) and covered the various air monitoring programs that are in place throughout the Ohio-West Virginia-Pennsylvania area. Particulate measurements proved that all NOVAA sites have improved air quality in recent years.

Dr. Michael Martello, DVM, from Steubenville, OH, spoke about rabies and other animal borne diseases during the afternoon session.

Mr. Tom Konst, RS, from the Carroll County, OH, Health Department hosted the October meeting. **Bob Morehead** from the Killbuck Valley Mosquito Abatement District presented a general overview of the mosquito abatement program. He showed equipment, maps of the service area and explained the scope and successes of the program. Mr. Morehead also discussed common mosquito borne diseases, especially Eastern Equine Encephalitis, and covered mode of transmission and preventative measures.

The afternoon session covered the Ebola Virus (hemorrhagic fever.) We watched a video concerning identification, communicability, and control of the disease. Actual cases from Africa were presented and a second video that covered the outbreak of Ebola in lab monkeys in Reston, VA. The films showed how well current epidemiologist can locate sources of disease and prevent further spread of the disease.

The November Tri-State Environmental Health Association meeting was hosted by the Belmont County, OH Health Department. The morning speaker, **Teresa E. Morelli,** Staff Attorney with Southeastern Ohio Legal Services, gave the group an overview of the rights and obligations of landlords and tenants from the beginning to the end of tenancy.

The afternoon session was presented by **Mr. Bruce MacLoed,** Technical Service Manager, Midwest Region, for Bio-Gro. He detailed sludge treatment including testing, pressing and drying sludge and land application of sludge.

TSEH has a new slate of officers for the coming year. **Dale Mann, RS** from the Wheeling-Ohio County Health Department is the new President, **Tom Konst, RS** from Carroll County, OH, is now Vice President and **Anthony LaPosta, RS,** from Hancock County is retaining the office of Secretary-Treasurer.

The January meeting was hosted by the Wheeling-Ohio County Health Department. **Ron Forren** gave us an update for 1997 and gave us copies of the new Emergency Child Care Center Rule and the new inspection form that coincides with the new rule. Lots of discussion resulted! Ron also discussed the Proactive Committee Report and urged local sanitarians to submit their monthly reports and monthly septic tank permit registers.

The afternoon session was conducted by **Mr. John Long,** President, of the Longs Restaurant Exhaust Cleaning System. He presented a slide show detailing proper exhaust cleaning, results and benefits.

Hancock County hosted the February meeting. **Mark Whittaker, RS,** Fairmont District, gave the group a presentation of the standardization procedures for certification of local health department food sanitarians. Mark feels that the standardization for sanitarians is beneficial, especially at a time when the public is demanding uniformity in all environmental health programs.

The afternoon session featured **Mr. Russell Smith,** a water well driller for over fifty years. Mr. Smith is a certified driller here in West Virginia. He shared his perspective on the well regulations and was justifiably upset that non-certified drillers who don't have West Virginia Contractor's licenses are allowed to drill in West Virginia. He also espouses grouting over concrete pads.

Karol Wallingford, RS, followed Mr. Smith and expertly outlined why the regulations were developed, how they were implemented and why they are enforced. She stressed that if any waivers are to be approved, the local sanitarian must submit a request to the State in writing and no drilling can begin until the written waiver is returned to the local health department.

Karol also reviewed the individual water sampling policy. Simply stated, Don't sample unless the well meets current design standards.

Richard Peggs from the WV Lead Program spoke about the importance of accurate environmental assessments in lead medical case management.

Marshall County Health Department hosted the March meeting. The program included a videoconference entitled "Tools for Drinking Water Protection." The conference is sponsored by the League of Women Voters Education Fund in partnership with the National Association of County and City Health Officials and 33 other organizations.

THOUGHTS TO PONDER! QUESTIONS/THOUGHTS THAT CONSUME MY DAY:

Submitted by Clarence Christian

CAN FAT PEOPLE GO SKINNY-DIPPING?

IF CORN OIL COMES FROM CORN, WHERE DOES BABY OIL COME FROM?

CAN YOU BE A CLOSET CLAUSTROPHOBIC?

IF NOTHING STICKS TO TEFLON, HOW DO THEY STICK TEFLON ON THE PAN?

HOW DO THEY GET A DEER TO CROSS AT THAT YELLOW ROAD SIGN?

IF IT'S TOURIST SEASON, WHY CAN'T WE SHOOT THEM?

DO THEY HAVE RESERVED PARKING FOR NON-HANDICAP PEOPLE AT THE SPECIAL OLYMPICS?

WHAT DO YOU DO WHEN AN ENDANGERED ANIMAL EATS ONLY ENDANGERED PLANTS?

WHY DO THEY STERILIZE THE NEEDLES FOR LETHAL INJECTIONS?

WHY DO KAMIKAZE PILOTS WEAR HELMETS?