THE CSTE WASHINGTON REPORT

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EDITOR'S NOTE:. The federal Agency for Toxic Substances and Disease Registry (ATSDR) concludes that for most of the chemicals measured in the outdoor air, the available air monitoring data are not adequate to evaluate fully the potential public health consequences of the Intel-New-Mexico air emissions. ATSDR recommends several public health actions including exploring the possibility of conducting additional sampling and monitoring to characterize residential exposures, physician health education, and reduction of air emissions where feasible. ATSDR is issuing the health consultation for public comment on February 2, 2009. Public comments will be accepted through April 3, 2009-- additional details are provided in this *Washington Report*.

The *CSTE Washington Report* is provided as an information resource for members of the Council of State and Territorial Epidemiologists on federal legislation and regulation affecting public health and epidemiology in the U.S.

STIMULUS OUTCOME -- After provisions in the Senate version of the stimulus legislation, the "American Recovery and Reinvestment Act" (H.R. 1) included $5.8 billion for Prevention and Wellness, and the House bill authorized $3 billion, the final outcome reduced the funding to $1 billion. This was done to accommodate three Republican moderates who felt funding for prevention programs, largely funded through CDC, but with great discretion provided to the HHS Secretary, were not appropriate items for an economic stimulus effort. The $1 billion is parsed as follows: $300 million for the Section 317 childhood immunization program; $50 million for HAI to the states; $650 million, "... to carry out evidence-based clinical and community-based prevention and wellness strategies authorized by the Public Health Service Act as determined by the Secretary, that deliver specific, measurable health outcomes that address chronic disease rates."

The Senate bill's provision of $5.8 billion for Prevention and Wellness was backed by President Obama, but pared back to ensure enough votes in the Senate to pass the stimulus bill. The Washington public health community is anxiously awaiting the President's FY 2010 budget request to see if he will include significant additional funding for prevention programs which he has indicated are needed as part of health care reform to lower health care costs. A broad outline of his budget will be presented on Feb. 27th, but is not likely to contain any detail about CDC, or its programs. That level of detail will be available in late April.

CDC′S ROLE DURING FOODBORNE OUTBREAKS

(The following is a statement issued by CDC February 6, 2009)

There are a lot of players that have different roles in the food safety system in this country. CDC′s role is non-regulatory, which means we don't regulate food or industries.

Most foodborne outbreaks are identified and investigated by local and state health departments. CDC provides consultation on some of those, as well as assistance on request for outbreaks that are particularly large, unusual, or severe. During a multi–state foodborne disease outbreak, CDC serves as lead coordinator between public health partners to detect the outbreak, define its size and extent, and to identify the source.

Specifically, we monitor surveillance for a number of foodborne infections. We also assist states in their investigations. When it′s a large nationwide foodborne outbreak we will lead the investigation to assist in finding the source. We think it′s very important find and identify the problem, the root cause of an outbreak, to prevent future and further illness so that we all can learn from what went wrong.

In recent years, large multi-state foodborne outbreaks have become more common, because better surveillance identifies outbreaks that would previously have been missed and because an increasingly centralized food supply means that a food contaminated in production can be rapidly shipped to many states causing a widespread outbreak.

CDC collaborates with regulators like the U.S. Food and Drug Administration, the United States Department of Agriculture, the Environmental Protection Agency, and state health departments to provide our expertise, information, and tools that people and communities need to protect their health.

CDC maintains and monitors several disease surveillance and outbreak detection systems in collaboration with public health partners. PulseNet, a sophisticated outbreak detection system, is a national surveillance network of CDC, state, and local public health laboratories and federal food regulatory agency laboratories. PulseNet performs pulsed-field gel electrophoresis ("DNA fingerprinting") on disease-causing bacteria that may be foodborne to find clusters of cases that might be related.

Once a potential multi-state outbreak has been detected, CDC′s OutbreakNet Team engages to investigate it. By collaborating with public health partners, OutbreakNet leads the epidemiologic investigation of multistate outbreaks. OutbreakNet coordinates communications among states and may lead epidemiologic studies. These are studies to develop a short list of suspect foods or other exposures ("hypothesis generation"), to identify food exposure associated with illness("case control studies"), and to determine how the food became contaminated. CDC also provides assistance in the field to any state requesting it. CDC′s laboratories maintain PulseNet surveillance to identify new cases, conduct advanced laboratory tests of disease-causing microbes, test suspect foods, and provide technical support to OutbreakNet and public health partners as part of the investigation.

Once a contaminated food source has been identified, public health action to control the outbreak can be taken by regulatory agencies such as FDA and USDA/FSIS. At this stage, CDC continues to investigate potential sources of illness and monitors for additional illnesses to determine when the outbreak is over. CDC also advises the public about what they can do to protect themselves, advises the medical community about how to treat the infections, and works closely with the regulatory agencies and industry to learn how to prevent similar outbreaks in the future.

Helpful Links

• CDC′s Salmonella Typhimurium Outbreak Update Web page

http://www.cdc.gov/salmonella/typhimurium/update.html

• CDC′s Salmonella Outbreaks Web page

http://www.cdc.gov/salmonella/outbreaks.html

• Timeline for Reporting Cases of Salmonella infection

http://www.cdc.gov/salmonella/reportingtimeline.html

PUBLIC COMMENT SOUGHT FOR THE INTEL, NEW MEXICO ATSDR HEALTH CONSULTATION -- The federal Agency for Toxic Substances and Disease Registry (ATSDR) concludes that for most of the chemicals measured in the outdoor air, the available air monitoring data are not adequate to evaluate fully the potential public health consequences of the Intel-New-Mexico air emissions. ATSDR recommends several public health actions including exploring the possibility of conducting additional sampling and monitoring to characterize residential exposures, physician health education, and reduction of air emissions where feasible. ATSDR is issuing the health consultation for public comment on February 2, 2009. Public comments will be accepted through April 3, 2009.

For this consultation ATSDR reviewed outdoor air quality data gathered by several parties including outdoor monitoring data collected by the New Mexico Environmental Department (NMED) and Intel-New Mexico in 2003 and 2004, as well as air modeling studies and outdoor air samples collected by NMED in residential areas near Intel-New Mexico in 2002 and 2003.

ATSDR concludes that data collected and reviewed are not sufficient to fully evaluate the potential public health consequences of air emission from Intel-New Mexico. The monitoring methods selected provide some useful insights about air quality.
A review of peak 1-hour levels of selected chemicals such as ammonia and propylene glycol monomethyl ether acetate, suggests that the Intel-New Mexico facility may be the source of some of them. However, the measured air pollution levels of these chemicals were below levels of health concerns. Therefore they are unlikely to pose a public health risk.

ATSDR is hosting community meetings to discuss the health consultation and to receive public comments on February 10, 2009 7:30p.m. - 9:30p.m., and February 11, 2009, 2:00p.m. - 4:00p.m. There will be a brief presentation at the beginning of each meeting. A media availability session will be held on February 10, 2009 at 6:00p.m. All meetings will be held in the Rio Rancho Room at The Inn at Rio Rancho Conference Center, 1465 Rio Rancho Drive SE, Rio Rancho, New Mexico, 87124. The meetings are open to the public.

Interested persons may access the health consultation on February 2 via the internet at: http://www.atsdr.cdc.gov/sites/intel
A copy of the health consultation will also be available for review on or after February 3, 2009 at the following locations:

Corrales Community Library 84 West La Entrada Road Corrales, NM 87048 Ph: 505-897-0733

Rio Rancho Library 950 Pinetree Rd. SE Rio Rancho, NM Ph: 505-891-5013

ATSDR will accept comments on the health consultation through April 3, 2009. Comments on the health consultation must be made in writing. Comments received

during the public comment period will be logged into the ATSDR administrative record for the health consultation and will appear in the final health consultation. Comments received (without the names of individuals who submitted them) and ATSDR's responses to these comments will appear in an appendix to the final public health consultation. Names of those who submit comments, however, will be subject to release in answer to requests made under the U.S. Freedom of Information Act (FOIA).

Send comments to: atsdrrecordscenter@cdc.gov, or mail to:

Records Center, ATSDR ATTN: Intel-New Mexico Site 1600 Clifton Road, N.E. MS F-09 Atlanta, GA 30333

RESEARCHERS FIND ABNORMAL CELLS IN THE BLOOD YEARS BEFORE LEUKEMIA IS DIAGNOSED -- Researchers have shown that abnormal white blood cells can be present in patients' blood more than six years prior to the diagnosis of a chronic form of lymphocytic leukemia. This finding may lead to a better understanding of the cellular changes that characterize the earliest stages of the disease and how it progresses. The study, led by researchers at the National Cancer Institute (NCI), part of the National Institutes of Health, and the U.S. Food and Drug Administration, was published in the Feb. 12, 2009, issue of the New England Journal of Medicine. "This finding emphasizes the need to better define predictors of cancer development," said NCI Director John E. Niederhuber, M.D. "Identifying the earliest indicators of cancer gives researchers an opportunity to study the window from the prediagnostic state to the transformation to disease. This may help define risk factors and may allow for the discovery of novel molecular targets for treatment of the disease."

Chronic lymphocytic leukemia (CLL) is a blood cancer that usually progresses slowly over many years. In this disease, abnormal white blood cells called B-cells accumulate in the blood and the bone marrow. The lymph nodes, spleen, and other organs may also be affected. Although CLL is the most common form of leukemia in adults in Western countries, little is known about what causes the disease or how it develops.

Previous research by the NCI/FDA team and others showed that some family members of CLL patients can have B-cells in their blood that have outer-surface proteins that are similar to proteins found on CLL cells. This abnormal condition, known as monoclonal B-cell lymphocytosis (MBL), occurs in over 10 percent of CLL family members and in about 3 percent to 5 percent of healthy adults over the age of 50, suggesting it might be a precursor of CLL.

In the current study, the research team identified 45 individuals among the more than 77,000 participants in the nationwide Prostate, Lung, Colorectal and Ovarian (PLCO) Cancer Screening Trial who were cancer-free upon entering the trial, were later diagnosed with CLL, and had frozen blood samples available for analysis that had been collected upon their enrollment in PLCO. Using sophisticated laboratory techniques to analyze the blood samples, the researchers found that 44 of the 45 CLL patients had

MBL between six months to more than six years prior to their CLL diagnosis. The MBL cells were identified by examining cell-surface proteins, or CLL markers, using a method called flow cytometry, and by using molecular techniques to confirm the presence of certain rearranged genes, known as immunoglobulin heavy variable (IGHV) group genes, found in CLL. In 41 patients, MBL was confirmed by both methods.

"Our findings indicate that MBL is present in virtually all of CLL patients prior to full-blown disease," said lead author Ola Landgren, M.D., Ph.D., of NCI's Division of Cancer Epidemiology and Genetics. "This important discovery provides novel insights into the natural history of CLL and will open new fields of investigation for understanding its causes." The risk of developing CLL for individuals with MBL appears to be low — on average, it is estimated that each year, only about one percent of them will develop CLL, he noted.

"Next, it will be important to isolate MBL cells and to conduct additional molecular analyses," says Gerald Marti, M.D., Ph.D., of the FDA's Center for Biologics Evaluation and Research, another study author. "This will provide insight into the differences in these cells that may influence why some transform into CLL whereas other do not."

Although the results might not have immediate implications for clinical practice, such as routine screening for MBL, the study will have an influence on CLL research. According to Neil Caporaso, M.D., another NCI author, "Identifying and studying MBL will provide insight that is not available when studying CLL itself. An important and unanswered question is what causes some individuals with MBL to progress to CLL while others remain disease free. Investigating MBL may help us to determine early risk factors for the disease and allows us to identify the precise molecular changes that occur in these cells that cause them to transform into CLL."

The NCI/FDA team says that the work underscores the importance of studying family history and progression of disease. Performing evaluations of members of cancer-prone families has been key to the identification and characterization of MBL; current work focuses on trying to identify molecular markers and environmental influences that predict risk and genes that influence CLL development. The team is working to characterize MBL better and to understand its biology to further define factors that lead to CLL. The team is also conducting studies that focus on related blood cancers and their precursors, including multiple myeloma and monoclonal gammopathy of undetermined significance.