

Sunday Chicago Tribune



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30 U.S. troops die in attack

Taliban say they downed copter in deadliest day of war in Afghanistan

The deadliest incident for U.S. forces in the 10-year war in Afghanistan claimed the lives of 30 Americans when their helicopter was shot down by enemy fire early Saturday.

On board were nearly two dozen Navy SEALs, many of whom were members of SEAL Team 6, the unit that conducted the raid that killed Osama bin Laden in May. That team is made up of a few hundred of the best-trained fighters in the U.S. military.

U.S. officials said the helicopter appeared to have been shot down; the Taliban quickly claimed responsibility. Seven Afghan commandos and a civilian interpreter also were killed, Afghan President Hamid Karzai said.

Karzai's office offered condolences to President Barack Obama and the families of the Afghan troops who died.

Obama issued a statement saying, "Their deaths are a reminder of the extraordinary sacrifices made by the men and women of our military and their families."

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Volunteers at U. of C. do drugs for science

By BARBARA BROTMAN Tribune reporter

There is a place at the University of Chicago where you can get and openly take methamphetamine. Or Ecstasy. Or alcohol. Or a placebo.

Because the place is a research lab, the Human Behavioral Pharmacology Laboratory, under the direction of psychiatry professor Harriet de Wit, which for decades has conducted some of the most important drug research nationwide.

She studies mind-altering drugs, including those that can be abused or lead to addiction. And she is one of only about 40 scientists in the U.S. who use human volunteers.

"We're interested in how the drugs make people feel," de Wit said. "The overall goal (is) to look at how people differ in their responses to drugs, (which) might predict what kinds of people might be at risk for abusing them."

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Rating not rattling D.C.

Partisan business as usual, despite U.S. downgrade

By JIM PUZZANGHERA Tribune Newspapers

WASHINGTON — The decision by Standard & Poor's to downgrade the U.S. credit rating may provoke some havoc in financial markets this week, but it's unlikely to prod Washington politicians to take the unpopular steps required to cut the nation's debt.

S&P criticized an increasingly

dysfunctional Congress riven by deep partisan divides, but its decision also put a spotlight on a credit rating industry whose miscalculations helped trigger the 2008 financial crisis.

A key to the political impact of the downgrade will be the reaction of financial markets Monday. Yet the markets might barely shudder, some analysts said, partly because S&P damaged its credibility with its miscalculation

of subprime mortgage risk during the housing boom.

Two other major agencies continued to give U.S. debt their highest rating, and investors worldwide still flocked to U.S. Treasury bonds.

"The markets instill discipline on politicians and governments. It's got to be a scarier reaction than we're likely to see," said

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Inside

Tribune business columnist Phil Rosenthal offers a little perspective: "It's not like we had our credit card shredded at the counter. We're too good a customer for that, but the clerk is loudly calling the manager over before letting the deals go through."

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CONSUMER WATCH

BRIAN CASSELLA/TRIBUNE PHOTO

Toxic metal stays in water

A cancer-causing substance, found at levels much higher than a California health standard, slips past city's treatment system

By MICHAEL HAWTHORNE Tribune reporter

Chicago's first round of testing for a toxic metal called hexavalent chromium found that levels in local drinking water are more than 11 times higher than a health standard California adopted last month.

But it could take years before anything is done about chromium contamination in

Chicago and scores of other cities, in part because industrial polluters and municipal water utilities are lobbying to block or delay the Obama administration's move toward national regulations.

The discovery of hexavalent chromium in drinking water is renewing a debate about dozens of unregulated substances that are showing up in water supplies nationwide. Potential health threats from many of the

industrial chemicals, pharmaceutical drugs and herbicides still are being studied, but researchers say there is strong evidence that years of exposure to chromium-contaminated water can cause stomach cancer.

Test results obtained by the Tribune show that treated Lake Michigan water pumped to 7 million people in Chicago and its suburbs contains up to 0.23 parts per billion of the toxic metal, well above an amount that researchers say could increase the long-term risk of cancer.

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INSIDE: Traces of sex hormones, prescription drugs, flame retardants turn up in Chicago water. Page 13



Urlacher: Bears should have FieldTurf

Chicago Sports

Bears, Chicago Park District fight off blitz of bad publicity over Family Fest fiasco. Chicagoland, Page 4

Tom Skilling's forecast High 88 Low 65

Chicago Weather Center: Complete forecast in Nation & World, Page 39

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Toxic metal stays in drinking water

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Chicago began quarterly testing for the dangerous form of chromium this year after the U.S. Environmental Protection Agency urged cities to track it while the Obama administration wraps up a scientific review — the first step toward a national standard. Until now, the results have not been shared with the public.

Federal officials are being nudged to act by California, which took a three-year look at the science and last month established the nation's first "public health goal" to limit hexavalent chromium, an industrial pollutant made infamous by the 2000 movie "Erin Brockovich."

The California Office of Environmental Health Hazard Assessment defines the goal, 0.02 parts per billion, as an amount that reduces the risk of developing cancer to a point considered negligible by most scientists and physicians. Studies show that exposure to the metal also increases the risk of reproductive problems, interferes with childhood development and causes liver and kidney damage.

Echoing their counterparts in other cities where the metal has been detected, Chicago officials stress that local tap water is safe and suggest that if a national limit is adopted, it likely would be less stringent than California's goal. But the findings raise new concerns about a toxic metal that can pass unfiltered through conventional water treatment.

City officials are studying ways to tweak equipment at Chicago's two massive treatment plants to screen out the metal.

At home, people can reduce chromium levels with reverse osmosis technology or special filtration products; inexpensive and widely sold carbon filters aren't certified to address the problem.

"We are asking our customers to be as interested as we are in the scientific advances that produce these findings, but we are urging them not to overreact," said Tom LaPorte, a spokesman for the Chicago Department of Water Management.

Most of the nation's water suppliers meet health standards for the 114 contaminants that are regulated.

Yet when a new risk is identified, it can take years before the EPA adds the pollutant to its official list of drinking water contaminants, in part because municipal utilities and industrial polluters fiercely object to changes that could cost them money.

The Government Accountability Office, the investigative arm of Congress, sharply criticized the EPA last month for failing to add new pollutants to the list during the administration of President George W. Bush.

The GAO concluded that the agency has done little to monitor unregulated contaminants in drinking water, and that the lack of data hampers the EPA's ability to determine which substances pose the greatest health threats.

Earlier this year, the Obama EPA overturned a controversial 2008 decision to keep perchlorate off the list, making the rocket fuel



ROBERT GAUTHIER/TRIBUNE NEWSPAPERS PHOTO

An upside-down flag is a sign of distress last year in Hinkley, Calif., where hexavalent chromium seepage was depicted in the film "Erin Brockovich."



BRIAN CASSELLA/TRIBUNE PHOTO

Chicago water has been found to have levels of hexavalent chromium that are more than 11 times higher than California's health standard.

ingredient the first new chemical to be regulated since a 1996 overhaul of the Safe Drinking Water Act. The agency is expected to complete its health assessment of hexavalent chromium by the end of the year.

"Strong science and the law will continue to be the backbone of decision-making at EPA," an agency spokeswoman wrote in an email response to questions.

Industry groups question the validity of research that led the EPA and the National Toxicology Program to identify chromium-contaminated water as a cancer risk.

Chemical companies have sponsored their own studies, many of which downplay the potential dangers.

"The interests of public health and industry are best served by ensuring that our chemical assessments are based on the best science," said Cal Dooley, president of the American Chemistry Council, an industry trade group. "These decisions have significant public health consequences as well as economic impacts."

Tracing newly discovered pollutants is difficult because local water utilities aren't required to

test for contaminants unless they are on the EPA's list. And if a utility decides on its own to conduct testing, it isn't required to divulge the results.

Bottled water is no different. Food and Drug Administration regulations for bottled water limit most of the same contaminants monitored in tap water but are silent when it comes to hexavalent chromium, drug residues or other unregulated substances. Moreover, some brands of bottled water use municipal tap water supplies.

"The argument here is really about the cost of cleanup and treatment," said Thomas Burke, associate dean of the Johns Hopkins Bloomberg School of Public Health and a former New Jersey environmental regulator. "Raising doubt about public health impacts has become a successful strategy for delaying action, especially when huge financial interests are at play. What we really should be talking about is how we can manage these risks."

Federal, state and local officials started testing for hexavalent chromium after the Environmental Working Group, a research and advocacy organization, detected the metal in treated drinking

chicagotribune.com/ watchdog

Read the Tribune's recent investigations and databases to make sense of the numbers.

water from Chicago and 30 other cities.

In their own tests, Chicago officials found there is little difference in hexavalent chromium levels before and after Lake Michigan water is treated. Levels averaged 0.21 parts per billion and peaked at 0.23 parts per billion, according to results posted on the city's website last week after the Tribune requested the information.

"The water utilities would rather have people not ask questions about this," said Ken Cook, the Environmental Working Group's president and co-founder. "But it's totally fair for people to ask why we aren't doing more to address this problem."

Chromium can be found naturally in the environment and also is dumped into waterways by industry, which uses it to make steel, plate metal, tan leather and prevent corrosion.

Current federal regulations limit and require water testing only for total chromium, a more lenient standard that includes another form of the metal, chromium-3, that is an essential nutrient. Critics say the rules need to be strengthened to target the dangerous form, also known as chromium-6.

The source of chromium in Chicago drinking water is unclear, though federal records show that some of the nation's biggest industrial sources are four steel mills in northwest Indiana that discharge wastewater into the city's source of drinking water.

Last year, records show, the U.S. Steel and Arcelor Mittal mills dumped a combined 2,350 pounds of chromium into Lake Michigan

and its tributaries, less than 9 miles from Chicago's water-intake crib off 68th Street. (The federal Toxics Release Inventory doesn't require industry to report specific types of the metal, but chromium-3 can convert to chromium-6 and vice versa in the environment.)

Industry stepped up its fight against tougher regulations when it became clear that chromium has contaminated water supplies throughout the nation. The award-winning movie "Erin Brockovich" dramatized one of the most high-profile cases: a miles-long plume of hexavalent chromium dumped by a utility in rural Hinkley, Calif., that led to a \$333 million legal settlement over illnesses and cancers.

During congressional testimony earlier this year, representatives for the nation's water utilities and chemical companies said more research is needed.

"In the absence of solid human health data from EPA, it is impossible to tell the public with any certainty what exactly the results of these tests may mean," Carrie Lewis, superintendent of the Milwaukee Water Works, wrote in a statement submitted on behalf of the Association of Metropolitan Water Agencies.

But after its own review of the science, California decided to move forward with its public health goal, based in part on a growing amount of research showing that young children and other sensitive groups face greater risks from toxic chemicals and heavy metals.

When California first proposed its chromium standard, industry and water utilities demanded another look at the science behind it. Four of the five reviewers agreed with the state's conclusions, including one who said the standard "should be accepted as one based upon sound scientific knowledge, methods and practices."

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Odd chemicals turning up in Chicago's drinking water

Tests find traces of sex hormones, prescription drugs, flame retardants

By MICHAEL HAWTHORNE
Tribune reporter

Trace amounts of sex hormones, prescription drugs, flame retardants and herbicides are being detected in treated drinking water pumped to more than 7 million people in Chicago and its suburbs.

In the latest round of testing prompted by a 2008 Tribune investigation, city officials discovered that more than two dozen pharmaceutical drugs and other unregulated chemicals pass through Chicago's massive treatment plants.

Little is known about potential health effects from drinking drug-contaminated water, but scientists and regulators increasingly are concerned about long-term exposure, even at very low levels.

"We need to start addressing the cumulative effects that these low-dose exposures could be having on people," said Thomas Burke, associate dean of the Johns Hopkins Bloomberg School of Public Health.

"There are no quick solutions," said Burke, who chaired a National Academy of Sciences com-

mittee that called for a dramatic overhaul of the way the U.S. regulates toxic chemicals. "But we need a new approach that is more responsive to emerging science."

Like other cities, Chicago must notify the public if its drinking water contains regulated contaminants, including lead, pesticides and harmful bacteria. There is no such requirement if pharmaceuticals and other unregulated substances are detected.

Annual water quality reports mailed last month to people in Chicago and the suburbs noted that the city is testing for substances that aren't on the U.S. Environmental Protection Agency's list of regulated contaminants. A list of results obtained by the Tribune is dated April 11 but wasn't posted on the city's website until after the newspaper asked for it last week.

City officials were prompted to start testing for the substances after the Tribune found trace amounts of pharmaceuticals, residue from personal care products and unregulated industrial chemicals in local tap water.

Substances found in the city's latest tests include the sex hormones testosterone and progesterone; gemfibrozil, a prescription cholesterol-fighting drug; and DEET, the active ingredient in bug spray.

The tests also found perfluoro-

ooctane sulfonate, an ingredient in Scotchgard stain-fighting coatings; bisphenol A, a hormonelike plastics additive; and tris (2-butoxyethyl) phosphate, a flame retardant chemical.

"Our very awareness of trace amounts of these chemicals comes in large part because we are aggressively conducting research on water quality and safety," said Tom LaPorte, a spokesman for the Chicago Department of Water Management.

Drugs end up in drinking water after people take medicines and residue passes through their bodies down the toilet. Conventional sewage and water treatment filters out some of the substances, or at least reduces the concentrations, but studies have found that small amounts still get through.

Although treated sewage from the Chicago area drains away from Lake Michigan, more than 300 other cities discharge treated waste and untreated sewage overflows into the lake and its tributaries, according to the EPA.

"Exposure to some of these chemicals ... is cause for consternation for people and concern over fish and wildlife impacts," said Rebecca Klaper, a researcher at the University of Wisconsin-Milwaukee who studies the Great Lakes.

The EPA's position is that it

Drugs in our water

Tests in Chicago and other cities are finding that treated drinking water contains trace amounts of pharmaceutical drugs, residue from personal care products and other unregulated contaminants. The potential health effects are unclear, but there are concerns about long-term exposure to a large variety of substances. Below are some of the chemicals recently found in Chicago's tap water.

Contaminant	Brand/common name	Common use
Bisphenol A	BPA	Production of plastics
cis-Testosterone	Epitestosterone	Steroid hormone
Dehydronifedipine		Blood pressure drug byproduct
Gemfibrozil	Lopid	Cholesterol medication
Ibuprofen	Advil	Pain reliever
Meprobamate	Equaril, Trancot	Anti-anxiety medication
N,N-diethyl-m-toluamide	DEET	Insect repellent
Perfluorooctane sulfonate (PFOS)		Ingredient of Scotchgard
Phenytoin	Dilantin	Seizure medication
Progesterone		Steroid hormone
Simazine	Aquazine	Agricultural herbicide

SOURCES: City of Chicago, Tribune reporting

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What you can do

Drug disposal: The detection of pharmaceuticals in water has prompted new advice about how to properly dispose of unused medicine. The Illinois EPA recommends taking it to collection events for household hazardous waste. If that is not practical, you can place unused drugs in the trash after grinding them up and mixing them with coffee grounds or cat box filler so they can't be stolen. Questions? Email the agency at EPA.Meds.Mail@Illinois.gov.

Filters: Conventional water treatment does not screen out many unregulated contaminants, but some household filters can help. Water filtration products are certified by NSF International, a nonprofit group. Visit nsf.org.

doesn't yet have enough evidence to limit pharmaceuticals and many other unregulated chemicals in drinking water. Water

officials say not enough is known to justify spending millions of taxpayer dollars to upgrade treatment plants.