
In The News

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HEADLINE: Surviving bacteria; Research could hold the solution to battling key threats like anthrax

BYLINE: Bruce Lieberman; STAFF WRITER

SOURCE: The San Diego Union-Tribune, March 19, 2003,

BODY:

Microbiology, the science of unseen organisms, is undergoing a revolution.

Propelled by modern technology, this revolution is changing the way scientists think about their subjects -- bacteria in particular.

Few creatures have contributed more to this shift in thinking than **Bacillus subtilis**, a model for a class of bacteria that includes some of the most deadly pathogens on the planet, including **Bacillus anthracis**.

At laboratories throughout the world, some in San Diego, scientists are studying the internal workings of *B. subtilis* to better understand its biology and the genetic traits it shares with *B. anthracis*.

A rod-shaped bacterium about two-millionths of a meter in length, *B. subtilis* is a marvel of evolution that has perfected the art of survival. Sensing a threatening change in its environment that could lead to starvation, the bacterium completely changes its biology.

Essentially, it creates a copy of itself inside itself, surrounds that copy with a nearly unbreachable wall and then dies. The newly created spore, meanwhile, lives on, waiting for conditions outside to improve.

This insight into the ingenuity of *B. subtilis* and other sporulating microorganisms -- including *B. anthracis* -- runs counter to what microbiologists previously believed about bacteria.

For most of the last century, conventional wisdom relegated bacteria to mere bags of enzymes, without any particular internal structure and little biological complexity.

"One of the fallacies is that you look at these bacteria and you think they are primitive cells," said Kit Pogliano, a UCSD biologist who studies *B. subtilis*. "In fact, they're not primitive cells. They're highly specialized cells."

HEADLINE: Georgia leads nation as syphilis increases

BYLINE: PATRICIA GUTHRIE

SOURCE: The Atlanta Journal-Constitution, November 21, 2003

BODY:

Georgia's rate of **syphilis** cases led the nation last year amid a resurgence of the disease among gay and bisexual men, the Centers for Disease Control and Prevention announced Thursday.

The **syphilis** increase is believed linked to dramatically rising numbers of HIV cases among men who have sex with men.

Atlanta recorded the third-highest urban rate of **syphilis**, behind San Francisco and Detroit, the CDC said Thursday in a teleconference on sexually transmitted diseases. Georgia was also listed among the top five states for cases of gonorrhea and chlamydia.

While the South has historically been a hot spot for sexually transmitted diseases, Georgia had experienced a decline in the 1990s, a trend experienced across the country.

But the arrow on the nation's **syphilis** rate charts headed back up in 2001 and 2002 among men, particularly gay and bisexual men, CDC statistics show. At the same time, rates declined among women and African-Americans, although blacks continue to be the population most affected by **syphilis**, CDC officials said.

Since 1999, CDC has targeted eliminating the disease, particularly in the South and among minority populations. But in the face of the new statistics, the agency acknowledged Thursday, it must redouble education and prevention efforts toward the gay and bi-sexual population.

"The campaign against **syphilis** is now being waged on two fronts," said Dr. Ronald Valdiserri, deputy director of the CDC's National Center for HIV, STD and TB Prevention. "We are working on one front to sustain the progress made among populations formerly hardest hit by **syphilis**, including African-Americans. On the second front, we're combating new challenges among gay and bisexual men."

HEADLINE: LOCAL CHILDREN GETTING STREP THROAT THAT RESISTS COMMON ANTIBIOTICS

BYLINE: ANITA SRIKAMESWARAN, POST-GAZETTE STAFF WRITER

SOURCE: Pittsburgh Post-Gazette, April 18, 2002

BODY: Local doctors continue to see area schoolchildren with strep throat caused by bacteria that has grown resistant to some popular antibiotics.

Federal infectious disease experts yesterday said they are interested in joining with the researchers from Children's Hospital to investigate the strain, which was first found here.

Researchers from Children's first reported in December that nearly half of the cases of strep throat in a group of schoolchildren they are studying was caused by bacteria that couldn't be killed by erythromycin, an antibiotic that is commonly prescribed for those allergic to penicillin, which is the first-line treatment.

Those findings, based on data gathered from October 2000 to May 2001, are being published today in the New England Journal of Medicine.

Researchers led by Dr. Judith Martin have continued checking for the resistant strain among children in the study, which monitors strep infections in students in kindergarten through eighth grade at an undisclosed school. The study entered its fourth year in October.

HEADLINE: Botulism strain seen as potential bioterror threat

SOURCE: St. Petersburg Times (Florida), March 26, 2003

BODY:

Federal officials fear the nation is vulnerable to a bioterror attack with a little-known agent that is easy to find and easy to produce. Just a gram of botulinum toxin - the weight of a paper clip - could kill more than 1-million people.

Officials are working both to plug vulnerabilities and to improve the ability to respond should an attack occur.

"We are making this the highest priority," said Dr. Anthony Fauci of the National Institutes of Health, one of the government's top bioterrorism officials. "We are really marshaling all available resources."

The toxin, the most poisonous found naturally on Earth, easily infects those who eat it. Experts fear terrorists could poison the nation's food supply and sicken thousands, making the 2001 anthrax attacks by mail seem minor by comparison.

The government has only enough antitoxin available to treat victims of a small attack - one official put the inventory at more than 1,000 doses. The special treatment needed for children is produced only by a California program now in jeopardy because of the state's budget problems.

The issue takes on particular urgency as the United States wages war with Iraq . In 1995, Iraq told the United Nations it had made more than 5,000 gallons of botulinum toxin and had loaded much of it into bombs and warheads. Inspectors believe Iraq 's president, Saddam Hussein, has materials capable of producing twice as much toxin, or enough to kill the world's human population three times over.

Disseminating botulinum toxin would not be particularly difficult, although basic microbiology skills would be necessary to do it, experts say.

Heating food long enough at a high enough temperature kills the organism, but foods like fruits and vegetables aren't cooked. Milk and other dairy products aren't heated long enough during processing to kill the toxin.

Botulism causes paralysis, starting at the head and moving down the body. Victims become limp, and at the beginning they can't move their eyes, facial muscles or vocal cords. They have trouble swallowing. Eventually, the paralysis moves through the central nervous system, and patients must be put on ventilators to keep their lungs pumping. Friday Home Edition

HEADLINE: 'Superbug' hits city hospitals; New strain of staphylococcus infects 50 people

BYLINE: Mohammed Adam

SOURCE: The Ottawa Citizen, May 17, 2001

BODY:

Ottawa hospitals have been hit by about 50 cases of a hospital-borne bacterial infection that can be deadly.

The Civic campus of the Ottawa Hospital is the hardest hit, with 35 cases of a new strain of MRSA (methicillin-resistant staphylococcus aureus) brought in by a patient from the United Kingdom. But the good news is that the infection is not as lethal as the more virulent strains that are expected to claim 8,000 lives in Canada this year.

Doctors say this strain can be treated with antibiotics.

"We've had this so-called superbug MRSA since 1990 and we've been struggling with clusters here and there. We control it and then it comes back to haunt us," said Dr. Virginia Roth, director of the Ottawa Hospital's infection prevention and control program.

"Yes, people die from staphylococcus. But what we've had since January is a new strain that we haven't seen before. But it is less worrisome than others we've seen because more antibiotics can treat it."

Dr. Roth emphasized that people have nothing to fear.

"This is not a scary superbug. I'd like to reassure the community that MRSA does not pose a risk to the general population and, within the hospital, we are taking standard procedures we always take when we see MRSA to make sure we protect our patients."

Of the 35 cases at the Civic campus, 10 are patients. Even though they have the organism in their bodies, they have not developed full-blown MRSA. So they are being treated with antibiotics to make sure it doesn't flourish. The 10 are spread over five wards but plans are afoot to isolate them in one ward to prevent contact with other patients.

HEADLINE:Got Mold? Hospitals make progress in the fight against fungus

BYLINE: Beth Burmahl

SOURCE:Health Facilities Management Magazine. May 2004

BODY:

Where there's moisture there could be mold. That is the most basic fact that hospitals dealing with the otherwise-complicated issue of mold growth must understand before they can begin to tackle this dangerous, potentially deadly foe.

From leaky pipes to moisture trapped in wall cavities--or any number of other scenarios--moisture is the first condition that must be present for a mold spore to grow. Add the right temperature and a carbon-based material for a spore to feed on, and it will begin to multiply--quickly.

"It supposedly takes a mold spore just four hours to germinate once it gets wet. After that it sends its roots out to look for carbon sources and the spores will begin developing," says Andrew Streifel, hospital environmental specialist with the University of Minnesota and a recognized expert on the subject. "Water, food and the right temperature . . . these are really the three ingredients necessary for mold growth."

Aspergillus, a species of mold capable of growing at body temperature, is often fatal for those who come down with invasive aspergillosis--the actual disease. In fact, the Centers for Disease Control and Prevention (CDC) estimates that health care-associated infections affect two million patients a year, with more than 90,000 people dying per year as a result. Of that number, about 1,000 deaths each year are related to aspergillosis, experts say.

But hospitals shouldn't get so scared they start randomly ripping out walls looking for hidden fungi. Although mold is everywhere and there is no such thing as a mold-free facility, the spores are only dangerous when they come in contact with a person susceptible to infection, like a highly immunosuppressed patient.

How do hospitals prevent that from happening? By becoming adept at responding to water damage, and finding, removing and preventing mold as well as assessing the risk for its potential growth.

More hospitals--many spurred by a litany of mold-related lawsuits--are learning to do just that.

HEADLINE: Vancouver Officials suspect fungus in woman's death

SOURCE: The Ottawa Citizen, August 15, 2002

BODY:

A tropical fungus that killed a Nanaimo woman in 1999 may have played a role in a second death, health officials said. Dr. Richard Stanwick, chief medical health officer for the area, said it may be an even more potent strain of infection from the fungus, **cryptococcus neoformans**, that killed the 46-year-old Victoria woman. Cryptococcus neoformans has infected more than 50 people on the island over the past three years. But the death currently under investigation involved the VG1 strain -- the first time it has been connected to a case involving a person. The woman was admitted to hospital in July and died last Thursday after treatment for inflammation of the brain.

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HEADLINE: Keeping candida in check

BYLINE: By Yam Cher Seng

SOURCE: New Straits Times (Malaysia), April 22, 2003

BODY:

HARMLESS in its yeast form, *Candida albicans* is described as a commensal organism. This means that it lives harmoniously in our bodies (with other organisms), deriving benefit but does us no harm nor provides us any benefits. It is usually found on the skin, in the mouth, throat, the folds and crevices of the digestive tract, bowel and in the vaginal tract of women.

However, given the right condition, it is an opportunistic organism, quick to multiply and to change into a disease-causing form, penetrating the surrounding cells. *Candida* can secrete a number of powerful toxins leading to a host of symptoms that includes lethargy, bloating, poor skin conditions, digestive problems, bowel dysfunction, and frequent vagina and urinary tract infections. Approximately 75 per cent of all women will develop a vaginal yeast infection at some time in their lives and that about half of them will have recurrent infections of a similar nature.

Women who are overweight, diabetic or who take antibiotics or hormonal preparations such as estrogen pills, steroids and oral contraceptives are especially vulnerable to yeast infection. Sugar is what *candida* feeds on and obesity is usually due to excess consumption of refined sugar. Diabetes is a condition of high sugar level in the blood which creates an ideal environment for *candida* growth.

Frequent or prolonged usage of antibiotics that target "bad" bacteria also kills "good" bacteria (probiotics), allowing *candida* to grow unchecked. Hormonal preparations suppress the immune system and increase the susceptibility to yeast infection. In fact, increased use of both antibiotics and oral contraceptives is believed to be a major reason why the incidence of yeast infections has doubled since the late 1960s.

In order to combat yeast infection, a sensible diet is essential. The anti-*candida* diet comprises wholesome and unprocessed foods free from yeasts, fungi, sugar-rich and fermented food. Avoid all forms of sugar in juices, jams, honey, preserved fruits, white bread and dairy products.

HEADLINE:Mold fears force evacuation of Mount Washington office

SOURCE: The Baltimore Sun, **February** 10, 2004

BODY:

Coldwell Banker Residential Brokerage plans to temporarily move out of its office in Mount Washington after a heavy weekend rain left water and possibly mold damage inside its leased building, company workers and their landlord said yesterday.

Himmelrich Associates Inc., which owns the property at 1340-A Smith Ave., said the 50 people who work in the first-floor office should be able to return soon.

"We learned (yesterday) they believe they have mold," said Samuel K. Himmelrich Jr., the landlord. "We've hired people to deal with this and do whatever it takes to get them back in as quickly as possible and make the space safe. This is a localized portion of their space where they say they have observed mold."

Workers at Coldwell Banker's Roland Park at Stone Mill office packed boxes and said they planned to relocate temporarily to their Timonium office. Company officials declined to comment.

No other tenants in the building reported a problem.

Mold has become an increasing problem in the Baltimore area, particularly because of flooding from recent rain and snow.

The Environmental Protection Agency doesn't consider most types of mold dangerous. The agency recommends removing the mold quickly and promptly plugging any leaks.

HEADLINE:Cryptosporidium trace found in drinking water

SOURCE: Milwaukee Journal Sentinel (Wisconsin), April 30, 1997

BODY:

For the sixth time since the massive 1993 Cryptosporidium outbreak, lab technicians have found a tiny amount of the parasite in treated drinking water.

Jeff Fleming, a spokesman for Mayor John Norquist, reported Tuesday that one oocyst was found this week in a test batch of 430 liters of water. City officials are confident, he said, that the public's health is not in jeopardy, but a second test is being conducted. The results, said Fleming, will be available this afternoon.

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HEADLINE: New giardia cases are declining

BYLINE: Jessica Van Sack

SOURCE: The Patriot Ledger (Quincy, MA), December 10, 2003

BODY:

Health officials say cases of the intestinal parasite **giardia** in Milton are tapering off.

For the first time in more than a month, the board of health office has gone four days without a new case. In the previous three weeks, 16 new reports came in, bringing the total number of cases to 88.

Of the new cases, most are children without symptoms, said the town's public health nurse, Mary Whitney.

The national Centers for Disease Control and Prevention continues to investigate whether the parasite originated from a children's pool in a Milton golf club. Surveys sent to members of the Wollaston Golf Club on Route 28 may hold the answer, officials say.

Often, however, the origin of parasites like **giardia** is difficult or impossible to pinpoint.

Because the first 25 reported cases involved members of the golf club, health officials began looking for the cause there, focusing on a children's pool. **Giardia** is spread through fecal matter, but a properly chlorinated and filtered pool would usually prevent the parasite, health officials say.

Dr. Bela Matyas, medical director of the epidemiology program for the state Department of Public Health, said it is possible "but not definite" that the country club played a role in the outbreak.

At this point, all new cases are likely secondary transmission, spread from person to person, health officials say.

HEADLINE: Two people survive Balamuthia amoebic encephalitis without recurrence

SOURCE: Drug Week, January 2, 2004

BODY:

Two people survived Balamuthia **amoebic encephalitis** without recurrence. It is unclear which of many drugs given may have been effective.

According to a study from the United States, "case histories are presented of 2 individuals (5-year-old female, 64-year-old male) who developed **encephalitis** caused by the free-living amoeba Balamuthia mandrillaris. Both individuals survived, after diagnosis and initiation of effective antimicrobial therapy.

"Both patients recovered, and there was no evidence of recurrence of the disease at 2 and 6 years after onset of symptoms. Awareness of Balamuthia as the causative agent of **encephalitis** and early initiation of antimicrobial therapy were critical to the recovery of both patients," wrote T.R. Deetz and coauthors.

The researchers concluded: "Although optimal antimicrobial therapy for Balamuthia **amoebic encephalitis** has yet to be determined, the antimicrobials used in these two cases effectively controlled the disease. These 2 individuals are the only known survivors of this otherwise fatal type of **amoebic encephalitis.**"

HEADLINE: Bear meat, if rare, can bite back; Albany Man gets trichinosis

BYLINE: Matt Pacenza; Staff Writer

SOURCE: The Times Union (Albany, NY), December 19, 2003

BODY:

A Clinton County man was hospitalized for two weeks this fall after contracting **trichinosis** by eating improperly cooked bear meat, state wildlife pathologist Ward Stone said Thursday.

The unidentified man contracted the parasitic infection after he ate black bear meat that he received as a gift. "He ate it close to raw," Stone said. "He said he just seared the outside."

The meat came from a bear that was shot in Clinton County , Stone said. The hunter, who then brought the kill to a Saranac Lake-area meat market for processing, wanted only the bear's pelt, so the market kept the meat to give as gifts.

Trichinosis, most commonly associated with uncooked pork, can also be contracted from eating meat from animals like horses, dogs, seals and walrus, according to the Centers for Disease Control and Prevention.

Sickness can be avoided if meat potentially containing Trichinella worm cysts is cooked until well-done, at least to 170 Fahrenheit, the CDC said.

The unlucky bear eater ate the tainted meat in October. He soon experienced severe muscle pain, was ultimately diagnosed with **trichinosis**, and spent 14 days in the hospital in early November. He has since recovered, but remains weak.

Other symptoms of the disease can include headaches, fever and aching joints. If untreated, it can proceed to heart and breathing problems, and even death.

According to the CDC, an average of 38 people die each year across the nation from **trichinosis**.

HEADLINE: Pinworms can be tough customers to get out of house

BYLINE: DR. HOWARD SEIDEN

SOURCE: The Toronto Star, December 16, 1993

BODY:

When 3-year-old Ann was noticed occasionally scratching her perianal area (rear end), no one thought too much of it. However, this in conjunction with her newly developed habit of waking two or three times per night prompted a pediatric consultation.

Mom was advised that pinworms might be the culprit. She was told to check Ann's anal area. The inspection could be done with a flashlight at night while Ann slept. When Mom wasn't able to see any "white, threadlike worms" or anything else suspicious, the doctor suggested a wait-and-see mode.

A week later, there were some raw spots around Ann's anus and her vulva was slightly red and swollen. As Ann became more irritable and whiny, Mom arranged another appointment with the pediatrician. This resulted in a transparent adhesive tape test, which confirmed a diagnosis of pinworms.

The lesson is clear: the best diagnosis results when the appropriate diagnostic tests are properly utilized.

The adhesive tape test involves pressing a clear celluloid tape against the anal/perianal skin. The hope is that the tape will remove pinworm eggs and that they will be visible microscopically.

Ann's tape test was positive. She had pinworms.

Pinworms are commonly found, especially in children. They'd likely be even more commonly found if people were aware of the symptoms and if the proper diagnostic tests were performed.

What are they? Worms, of course. Mamma worms are from 8 to 13 mm long and up to 0.5 mm wide. Pappa worms measure 2 to 5 mm in length and are less than 0.2 mm in width. Those little eggs we were talking about measure 60 by 20 microns, which explains why you need a microscope to see them.

Mature worms seem to prefer the area of the gut around the appendix. It's in this romantic cesspool that they mate. Pregnant mammas then make their way up the ascending colon, across the transverse and down the descending colons, through the rectum to the anus, where they begin depositing eggs on the surrounding skin.

HEADLINE: Geneticists To Study Parasites That Infect 2 Billion

SOURCE: Science Daily, May 25, 2004

BODY:

Scientists at the Genome Sequencing Center (GSC) at Washington University School of Medicine in St. Louis have received a four-year, \$2 million National Institutes of Health (NIH) grant to study the genetics of two groups of parasitic roundworms, ascaris and hookworm.

These roundworms, also known as nematodes, infect an estimated 2 billion humans in tropical and developing countries, inflicting symptoms ranging from intestinal discomfort to mental retardation to life-threatening blockages of key digestive structures.

The principal investigator of the new grant is Richard K. Wilson, Ph.D., director of the GSC and professor of genetics. Sandra Clifton, Ph.D., assistant director of the GSC and research assistant professor of genetics, is co-principal investigator.

"We plan to produce the data scientists need to develop new treatments that interfere with the activities of key genes in ascaris and hookworm," says Clifton. "We're also going to investigate unusual aspects of their biology, hoping to identify unique proteins that will make it possible to develop vaccines."

A recent study of mostly urban Peruvian women found 65 percent had ascaris and 48 percent had hookworm. In the Philippines, a sample of 333 school-age children revealed 75 percent had ascaris and 45 percent had hookworm.

"One major effect of hookworm is anemia --- the worms sit in the intestine and drink the host's blood," explains investigator James McCarter, M.D., Ph.D., an adjunct GSC faculty member. "In children, this can lead to stunted growth and detrimental effects on cognitive development." . . . Ascaris lives in the small intestine and can grow to 12 inches in length, causing diarrhea and, in rare cases, a potentially life-threatening impairment of the bile duct.

There are two ascaris species and five hookworm species, and GSC scientists plan to identify at least half of their genes. The information they produce will be made publicly available through Nematode.net, an online database of roundworm genetics created by GSC researchers during earlier nematode research.

In that previous research, funded by the NIH and the National Science Foundation, geneticists focused on a broader range of roundworms that infect humans, animals and plants. The Washington University effort identified and made publicly available about 10 to 20 percent of the roundworms' genes.

Under the new NIH grant, GSC researchers are already comparing the genomes of individual species of ascaris and hookworm. . . .

HEADLINE: Patient's unusual herpes leads Southwest to close its ER for several hours

BYLINE: Regina McEnery and Michael O'Malley, Plain Dealer Reporters

SOURCE: Plain Dealer (Cleveland, Ohio), **May** 1, 2003

BODY:

Southwest General Health Center shut down its emergency room for several hours yesterday afternoon after an international traveler showed up with a rash that looked suspiciously like smallpox.

Cuyahoga County Health Commissioner Tim Horgan said the patient actually had disseminated herpes, an unusual version of the herpes virus that produces blisterlike sores on the face and extremities.

"Current physicians don't see enough of these kinds of cases to see the difference," Horgan said.

Southwest General revealed few details about the case, but Middleburg Heights Mayor Gary Starr said he was told the patient was a woman in her late 20s from Ecuador .

HEADLINE: U.S. Health Official Is Optimistic On Containing Monkeypox Virus

BYLINE: By LAWRENCE K. ALTMAN

SOURCE: The New York Times, **June 20, 2003**

BODY:

The director of the Centers for Disease Control and Prevention said yesterday that she was optimistic that the outbreak of monkeypox could be contained in the United States by proper techniques of isolating humans and by tracing infected animals.

The outbreak, the first in the Americas, is believed to have resulted from a Gambian giant rat imported from West Africa, where the disease is endemic. The rat then infected prairie dogs that were sold or traded at various pet shops and other sites in this country.

"We are involved in a very aggressive investigation of the animal sources linked to this outbreak," said the director, Dr. Julie L. Gerberding.

Investigators are trying to track down all the animals to determine whether "there is ongoing risk from exposure to these animals in various settings," Dr. Gerberding said.

So far, health officials are investigating 87 cases of monkeypox in 6 states, and laboratory tests have confirmed the viral infection in 20 of them. Wisconsin has most cases, 38; followed by Indiana, 24; Illinois, 19; Ohio, 4; Kansas, 1; and Missouri, 1.

All cases are believed to have resulted from exposure to infected prairie dogs and other pets, Dr. Gerberding said in a news conference.

Epidemiologists have not documented any case of person-to-person transmission of the monkeypox virus in the outbreak. Medical experts have ruled out person-to-person transmission in one case that was under investigation. No deaths have been reported.

Of 75 cases for whom the disease control centers had received more detailed information, 20, or 27 percent, had been admitted to hospitals, some to make it easier to provide proper isolation.

Monkeypox is a cousin of the virus that causes smallpox. Smallpox vaccinations have been given to at least 20 people who were exposed, Dr. Gerberding said.

HEADLINE: RSV outbreak, influenza death show that viruses remain a serious threat

BYLINE: By Nichole Aksamit

SOURCE: Omaha World Herald (Nebraska), **January 23, 2004,**

BODY:

Even though flu activity has subsided in Nebraska and Iowa, we're not out of the winter-virus woods yet.

Nebraska on Thursday reported its first influenza-related infant death of the season. Health officials in both states are urging people to keep washing their hands to stave off another round of flu and other seasonal viruses.

Omaha-area hospitals and pediatricians already are reporting a high volume of respiratory syncytial virus, or RSV.

The virus, which circulates every winter, causes infections that can lead to hospitalization and even death in young children, particularly those who are born prematurely or who have weakened immune systems.

Immanuel Medical Center admitted one baby with RSV Monday and three more on Tuesday, and it diagnosed two others on Wednesday.

The Pathology Center at Children's Hospital in Omaha, which also does lab work for Omaha's Methodist Hospital and other area health-care providers, confirmed 90 RSV cases in the first two weeks of January, compared with 42 in the entire month of January last year.

"Our hospital is a full house at this time," said Children's spokeswoman Deb Naegele. "And many of our cases are due to RSV."

RSV often strikes an area after influenza. The flu's early assault on the Midlands this season may help explain the recent RSV surge.

HEADLINE:HIV risk growing among women and teens

BYLINE: MARILYNN MARCHIONE

SOURCE: Milwaukee Journal Sentinel (Wisconsin), **February** 20, 2004

BODY:

One of every three new HIV infections in the United States is due to sex between a man and a woman, a new federal analysis reports today.

Women increasingly are at risk in what they thought were stable relationships, health experts say.

Teens also are apparently unaware of the risks -- nine of every 10 infections in teens were due to heterosexual sex, and most were in girls.

Drug use accounts for a substantial portion of the remaining cases, though this was not separated from other methods of transmission in the report.

The trends show that the AIDS epidemic in the United States is evolving from one that predominantly affects gay white men to one that increasingly also affects women and minorities, said Doug Nelson, executive director of the AIDS Resource Center of Wisconsin, the main AIDS service organization in the state.

"We cannot forget that HIV infection is always possible whenever there is unprotected sex and there is the sharing of needles if someone is a drug user. Being complacent about that fact is just profoundly dangerous," he said.

"Women should embrace a philosophy of always protecting themselves from HIV. Don't ever, ever rely on someone else for protection. Always insist on condom use during sex, always insist on clean needles if you are a drug user."

The report by the Centers for Disease Control and Prevention is based on new HIV cases reported by 29 states from 1999 to 2002.

All states now report HIV infections to the U.S. agency, but some have not done so long enough for any trends to be considered reliable. Wisconsin was among the first states to adopt such reporting in the 1990s.

HEADLINE : SARS may have followed the same path as AIDS virus

SOURCE: Post-Gazette, May 02, 2003

BYLINE: Michael Woods, National Bureau

WASHINGTON -- A new genetic analysis of SARS suggests the virus became a health menace by pulling the same biological trick that the AIDS virus used decades ago to trigger its global epidemic.

"These data are consistent with the hypothesis that an animal virus for which the normal host is currently unknown recently mutated and developed the ability to infect humans," Canadian scientists said yesterday in one of two reports on SARS's genome, or genetic blueprint.

The studies, which officially unveil details of SARS's genome, were rushed into print because they open new doors to finding new drugs, a vaccine and quick diagnostic tests for the deadly respiratory disease.

"We should have something to combat this epidemic in the near future," Dr. M. Stephen Oberste, of the U.S. Centers for Disease Control and Prevention, predicted at a news briefing.

CDC got the virus from a mucus sample that Dr. Carlo Urbani took from his own body. He was the World Health Organization expert who discovered SARS, and then caught the disease and died from it in March at age 46.

A team of Canadian scientists, headed by Dr. Marco A. Marra, of the British Columbia Cancer Agency Genome Sciences Center in Vancouver, British Columbia, did the other study. They deciphered the genetic sequence of a SARS strain, or variety, found in a patient in Toronto.