

Swine flu virus dominant strain worldwide: WHO



The H1N1 swine flu virus is now the predominant flu strain worldwide, although it shows no signs of becoming more virulent and continues to produce mild-to-moderate symptoms in most people, the World Health Organization's flu chief said Thursday.

In some countries, the swine flu accounts for up to 70 percent of the flu viruses being sampled, Dr. Keiji Fukuda said during a press briefing, the Associated Press reported.

In the United States, virtually all flu activity right now is from the H1N1 virus, according to federal health officials.

But unlike seasonal flu, which typically strikes hardest at people over age 65, the H1N1 swine flu targets a disproportionate number of people under 65, Fukuda said.

"We remain quite concerned about the patterns that we're seeing," he said.

Fukuda said the H1N1 flu virus appears to be stable, with samples from around the globe very similar to those seen when the virus first emerged in Mexico and the United States in April, the AP said. In the United States, a federal health official said Tuesday that the country had 31.8 million H1N1 flu vaccine doses available and was on track to have another 10 million ready by week's end.

So far, that hasn't been enough to prevent long lines at vaccination centers, but it is consistent with what officials had projected earlier this week.

"We're having a steady increase in the availability of vaccine, but not nearly as rapidly as we would have liked," Dr. Thomas Frieden, director of the U.S. Centers for Disease Control and Prevention, told reporters during a teleconference. "That is encouraging, but it is not nearly as much as we would like. We realize it is frustrating and incon-

venient (to patients and to physicians). As public health professionals, it is frustrating because, in part, many people who seek the vaccine will not get vaccinated later. They might not come back. We ask people to continue to be persistent."

Officials also said that more health-care work-

ers than usual are availing themselves of the seasonal flu vaccine, which is in short supply in some areas due to heavy demand, according to published reports.

"We're seeing a higher uptake of the seasonal influenza vaccine by health-care workers than in

previous years," said Frieden. "We'll have to wait and see how that goes and how extensive it is."

Demand for the regular, seasonal flu vaccine among the general population has also been unprecedented, Frieden added, with 90 million doses already distributed to providers and 114 million expected to be available by year's end.

However, virtually all of the flu being diagnosed right now is H1N1.

"We're seeing almost no seasonal flu," Frieden said. That doesn't mean the seasonal flu shot won't be needed, however. "What the rest of the season holds, only time will tell," he said.

Frieden also reiterated the importance of antiviral medications, such as Tamiflu or Relenza, regardless of whether the vaccine is available. That's especially true for people with certain chronic medical troubles, such as asthma and heart disease.

As always for everyone, the message of the season is, wash your hands frequently, cover your mouth when sneezing or coughing, and stay home if you are sick.

"The flu season lasts till May, and this flu season is unlike any other for at least 50 years," Frieden said. "We don't know what will happen, but we will continue to monitor and do everything we can to prevent or reduce the spread of flu."

(Source: HealthDay News)

The brain comes alive with the sounds of music

Call it the non-druggy drug: Music can promote memory, social behavior and communication in patients with severe brain disorders, but researchers don't understand how music works in the human brain to improve mental powers and the ability to interact with others.

Now, new research in monkeys suggests that humans' ability to perceive music may have been developed through the ability of animals to communicate with one another using vocalizations. After all, the researchers noted, the sounds of human speech have much in common with the sounds made by animals. For example, human speech and animal vocalizations contain the same kinds of tones, which are known as "complex tones."

Researchers at Georgetown University Medical Center studied brain activity in the auditory cortex of monkeys. They found that the brain cells known as neurons were tuned to certain frequencies and harmonic sounds.

"The understanding of neural mechanism of 'innate' music features in non-human primates will facilitate an improved understanding of music perception in the human nervous system," study co-author Yuki Kikuchi, research associate in the department of physiology and biophysics, said in a university news release. "This will allow a neurobiological framework from which to understand the basis of the effectiveness of music therapeutic interventions."

The study authors were scheduled to present their findings at the annual meeting of the Society for Neuroscience, held Oct. 17 to 21 in Chicago. The study was funded by grants from the U.S. National Institutes of Health.

(Source: HealthDay News)

A drug to cure spinal cord injuries?

Researchers have identified a potential target for drug treatment of spinal cord injuries.

Cells in spinal cord scar tissue release molecules that prevent severed nerve fibers from passing the damaged area and making new connections that would restore feeling and movement.

In the new study, researchers identified where these molecules -- chondroitin sulfate proteoglycans (CSPGs) -- bind to the surface of neurons. This location may offer a target for drug therapy.

Scientists have been searching for this "docking station" for nearly two decades. It was known that CSPGs inhibit regeneration of nerve fibers, but it wasn't known how the molecules did it, explained senior study author John Flanagan, a professor at Harvard Medical School in Boston, in a Harvard news release.

Now that the site where CSPGs bind to neurons is identified, researchers can begin looking for molecules that will block this docking station and other ways to disrupt it.

"This discovery suggests that we might be able to treat central nervous system injuries with a pill in the future. In reality, we'll probably need a drug cocktail because CSPGs are not the only barrier to regeneration," study co-author Jerry Silver, a professor at Case Western Reserve University, said in the news release.

The study was published Oct. 15 in the journal *Science*.

(Source: HealthDay News)

Fetal heart rate monitor warning

Doctors are warning expectant parents that at-home fetal heart rate monitors should only be used for "fun" and not as an alternative to medical advice.

The devices, which pick up the sound of the baby's heartbeat, can give "false reassurance", the British Medical Journal reports.

They can also cause unnecessary anxiety in untrained hands, doctors warn.

The Royal College of Midwives said the availability of the devices was of concern to their members.

It comes after a 34-year old pregnant woman used her at home fetal monitor after she noticed her baby moving less frequently when 38-weeks pregnant.

Over the weekend she had reassured herself by listening to the baby's heartbeat but went to hospital on the Monday after being unable to detect it.

An urgent ultrasound showed the baby had died in the womb and doctors believe the patient had been picking up her own heartbeat or placental blood flow with the device.

Although the tragic death may have been unavoidable, the use of a fetal heart monitor certainly delayed the patient attending hospital, says Dr. Abhijoy Chakladar, an anaesthetist at Princess Royal Hospital in Brighton who treated the patient and highlights the issue in the BMJ article.

He is quick to point out that stillbirth is a rare event and pregnant women should not be unduly alarmed.

"These monitors are great fun as long as they are just used for a bit of bonding with the baby or play with older siblings.

"But they become dangerous when they're used by untrained people as an alternative to seeking medical attention.

"Expectant mothers who notice a reduction in fetal movement or have any other concerns about their baby's health should instead contact their midwife or labor ward for expert advice and reassurance."

It is the second such case highlighted this year in the BMJ.

Doctors previously raised the problem of false reassurance with a baby who survived but required neonatal intensive care.

A spokesman for the Medicines and Healthcare Products Regulatory Agency said it was aware of the case.

But he warned: "Members of the public using fetal monitors at home are unlikely to have the necessary knowledge or experience to use the device effectively and if they are concerned about the health of their baby they should seek medical advice."

Donald Peebles, spokesman for the Royal College of Obstetricians and Gynaecologists, said the devices did not really give much information anyway.

"If you're just doing it for fun and you can't pick up the heart rate because you're pointing it in the wrong direction that would unnecessarily frighten you.

"And it shouldn't be used to provide reassurance." Mervi Jokinen, from the Royal College of Midwives, said: "These devices may be sold as a bit of fun for parents to use, but let me be categorically clear; there is absolutely no substitute for speaking to your midwife or doctor as soon as possible if you think that there is something wrong during your pregnancy."

(Source: BBC)

5 ways to improve indoor air quality

We tend to think of air pollution as something outside -- smog, ozone, or haze hanging in the air, especially in summer. But the truth is, the air inside homes, offices, and other buildings can be more polluted than the air outside. The air inside your home may be polluted by lead (in house dust), formaldehyde, fire-retardants, radon, even volatile chemicals from fragrances used in conventional cleaners. Some pollutants are tracked into the home. Some arrive via a new mattress or furniture, carpet cleaners, or a coat of paint on the walls.

In that mix, you'll also find microscopic dust mites -- a major allergen -- plus mold and heaps of pet dander, says David Lang, MD, head of Allergy/Immunology at the Cleveland Clinic. "Even if you don't have pets, you've probably got pet dander," he tells WebMD. "It's become what we call a community allergen. Pet owners carry it around on their clothes and shed it throughout the day. You can't get away from it."

Children, people with asthma, and the elderly may be especially sensitive to indoor pollutants, but other effects on health may appear years later, after repeated exposure.

Indoor allergens and irritants have become much more important in recent decades because we're spending more time indoors, Lang says. And because modern homes are airtight, these irritants can't easily escape. "We're all exposed to a greater degree than we were three or four decades ago," he says.

5 simple steps to improve indoor air quality

1. Keep your floors fresh.

Suck it up. Chemicals and allergens can accumulate in household dust for decades. By using a vacuum with a HEPA filter you can reduce concentrations of lead in your home. You can also get rid of other toxins, like brominated fire-retardant chemicals (PBDEs) as well as allergens like pollen, pet dander, and dust mites.

Using a vacuum cleaner that has strong suction, rotating brushes, and a HEPA filter ensures that dust and dirt won't get blown back out in the exhaust. In high traffic areas, vacuum the same spot several times. Don't forget walls, carpet edges, and upholstered furniture, where dust accumulates. For best results, vacuum two or more times each week and wash out your filter regularly.

Mop it up. Mopping picks up the dust that vacuuming leaves behind. You can skip the soaps and cleaners and just use plain water to capture any lingering dust or allergens. New microfiber mops (and dust cloths) reportedly capture more dust and dirt than traditional fibers and don't require any cleaning solutions whatsoever.

Keep it out. Put a large floor mat at every door. People track in all sorts of chemicals via the dirt on their shoes. A door mat reduces the amount of dirt, pesticides, and other pollutants from getting into your home. If the mat is big enough, even those who don't wipe their shoes will leave most pollutants on the mat -- not the floors in your home.

If you live in a home built before 1978, there's a good chance that lead paint still exists on your walls. But even in a newer home, you may face lead exposure -- from lead dust tracked in from outside. Lead dust can raise the risk of exposure for young children -- a serious problem that can damage the brain, central nervous system, and kidneys. Pesticides are also linked with brain damage in young children. Kids are vulnerable to higher exposures because they tend to get dust on their fingers and then put their fingers in their mouths.

To best protect your family, ask people to remove their shoes when entering your home. Keep house shoes, slippers, and socks near the door.

2. Keep a healthy level of humidity.

Dust mites and mold love moisture. Keeping humidity around 30%-50% helps keep them and other allergens under control. A dehumidifier (and air conditioner during summer months) helps reduce moisture in indoor air and effectively controls allergens, Lang says. An air conditioner also reduces indoor pollen count -- another plus for allergy-sufferers.

More tips for dehumidifying your home:

Use an exhaust fan or crack open a window when cooking, running the dishwasher, or bathing.

Don't overwater houseplants.

Vent the clothes dryer to the outside.

Fix leaky plumbing to prevent moisture-loving mold.

Empty drip pans in your window air conditioner and dehumidifier.

3. Make your home a no-smoking zone.

"Probably the single

most important aspect of indoor air pollution is secondhand cigarette smoke," says Philip Landrigan, MD, a pediatrician and director of the Children's Environmental Health Center at Mount Sinai School of Medicine in New York City.

Cigarette smoke contains more than 4,000 chemicals. Research shows that secondhand smoke increases a child's risk of developing ear and respiratory infections, asthma, cancer, and sudden infant death syndrome (SIDS). For the smoker, this addiction causes cancer, breathing problems, heart attacks, and stroke.

If you want to stop smoking, support groups, nicotine-replacement therapy, and other medications can help. Find a method that works for you, get some support (friends, family, fellow quitters, counseling), and think positive. Focus on your reasons for quitting -- not on your cravings.

More Americans than ever before have kicked the habit, according to the CDC. But if you relapse, make sure you don't smoke inside the house. "If you just can't quit, at least smoke outside," Landrigan says.

4. Test for radon. Whether you have a new or old home, you could have a radon problem. This colorless, odorless gas significantly raises the risk of lung cancer. Radon is the second leading cause of lung cancer in the U.S. today. If you smoke and your home has high radon levels, your risk of lung cancer is especially high.

Radon is a radioactive gas. It comes from the natural decay of uranium found in nearly all soils. It typically moves up through the ground and into your home through cracks and holes in the foundation. Drafty homes, airtight homes, homes with or without a basement -- any home can potentially have a radon problem.

Granite countertops have also been linked to radon. While experts agree that most granite countertops emit some radon, the question is whether they do so at levels that can cause cancer. Testing is easy, inexpensive, and takes only a few minutes. If you discover a radon problem, there are simple ways to reduce levels of the gas that are not too costly. Even high radon levels can be reduced to acceptable levels. The Environmental Protection Agency offers a "Consumer's Guide to Radon Reduction."

5. Smell good naturally. You may associate that lemony or piney scent with a clean kitchen or clean clothes. But synthetic fragrances in laundry products and air fresheners emit dozens of different chemicals into the air. You won't find their names on the product labels. Conventional laundry detergents, fabric softeners, dryer sheets, and air fresheners in solid, spray, and oil form may all emit such gasses.

In one study, a plug-in air freshener was found to emit 20 different volatile organic compounds (VOCs), including seven regulated as toxic or hazardous under U.S. federal laws. But these chemicals were not included on the label -- only the word "fragrance" is required to be listed. But the actual composition of the fragrance is considered a "trade secret."

Most fragrances are derived from petroleum products, and generally haven't been tested to see if they have any significant adverse health effects in humans when they are inhaled. (Tests usually focus on whether a fragrance causes skin irritation.) Some that have been tested raise concern. Phthalates are a group of chemicals often used in fragrances and also used to soften plastics. Studies show that phthalates disrupt hormones in animals. What can you do?

Look for fragrance-free or naturally-scented laundry products.

Switch to mild cleaners that don't include artificial fragrances.

Stop using aerosol sprays -- deodorants, hair sprays, carpet cleaners, furniture polish, and air fresheners.

Let in fresh air. Open windows so toxic chemicals don't build up in your home. What if you or your child has pollen allergies? Then keep rooms ventilated with a filtered air-conditioning system.

Use sliced lemons and baking soda to get a clean scent in the kitchen.

Bring nature indoors. Any room is prettier with a fern, spider plant, or aloe vera. It's also healthier. NASA research shows that indoor plants like these act as living air purifiers -- the foliage and roots work in tandem to absorb chemical pollutants released by synthetic materials. If you have kids or pets, make sure the plants aren't poisonous if ingested.

(Source: WebMD.com)