

BIG THREAT Constant Exposure Causes Anxiety, Increasing Chance Of Cardiac Disease

MORE THAN JUST A HEADACHE

Noise can up risk of heart disease

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Bengaluru: In a city once fabled for its calm but now known for its chaotic traffic and pollution, doctors are worried about a new contributing factor to heart disease — noise pollution.

"We have seen that constant exposure to traffic noise coupled with pollution causes anxiety and adds to risk of cardiac disease," said Dr C N Manjunath, director, Jayadeva Institute of Cardiovascular Sciences and Research. "Noise can result in an increase in heart rate and blood pressure. There is an absolute correlation between higher heart rate and cardiovascular risk," he said.

A German study, the results of which were released

NOISE ANNOYS

last week, said, "Exposure to road and rail traffic-related noise pollution not only leads to onset of heart disease, but could trigger a heart attack."

Dr Manjunath added: "Though no such specific research has been done in Bengaluru, the findings could be true of our city too." He said people living with pacemakers are always advised to keep away from loud noise. "Pacemakers (which electrically stimulate the heart if it's beating too slowly or if it misses a beat) are very sensitive to noise," he said.

BAD FOR SLEEP, WORSE FOR BODY

HOW DOES NOISE AFFECT PEOPLE'S HEART

We get habituated to higher decibel car horns or speeding trains if we are exposed to the noise on a daily basis, but our cardiovascular system doesn't

IMMEDIATE IMPACT

1 THE NERVOUS SYSTEM

Loud sound affects it and changes deep sleep into a lighter stage of sleep

2 BLOOD PRESSURE

Supposed to be low during sleep, but rises with every noisy interruption

3 HEART RATE

Registers an increase

LONG-TERM EFFECTS

> Cycle of noise pollution-poor sleep-brain stimulation (leading to a neuroendocrine or hormonal response) can lead to atherosclerosis (buildup of plaque in the blood vessels)

(Adapted from Environment Health Perspectives in Feb 2014)

- > If coupled with stress, loud noise increases levels of stress hormones (such as cortisol) and hikes risk of hypertension, stroke, heart failure and immune problems
- > Acute exposure to noise activates nervous and hormonal responses, leading to temporary increase in blood pressure, heart rate and vasoconstriction

Mahesh Benkar

STUDY SHOWS NOISE EXPOSURE INCREASES RISK

> Exposure to traffic (air, rail and road) noise increases one's risk of having a heart attack, says newly released Noise-Related Annoyance, Cognition, and Health study findings

> Researchers analyzed data of over a million Germans over the age of 40. Their addresses were mapped with respect to road, rail, and traffic noise exposure. They compared exposure to traffic noise of 19,632 patients who had suffered a heart attack with 8,347 people who had not suffered a heart attack

> The study found a 'statistically significant' association between noise exposure and death caused by heart attacks

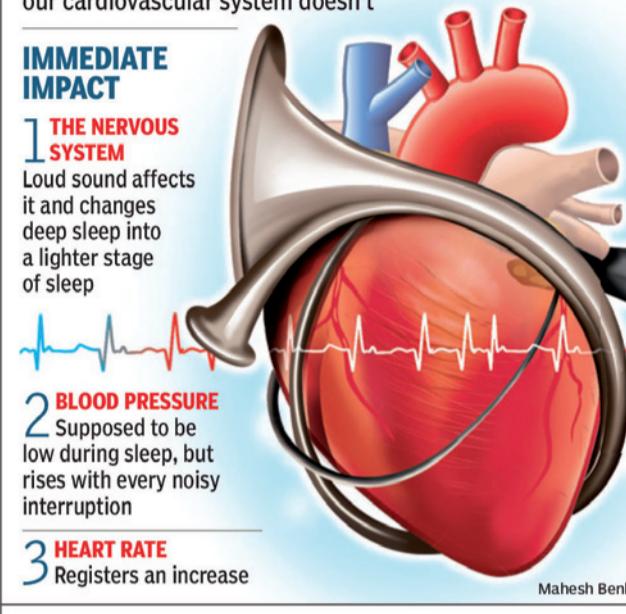
> It found that people exposed to noise levels of 60 to 65 decibels had a 9% increase in risk, and those exposed to more than 70 decibels a 13% increase

Occasional exposure to loud noise can be detrimental, but constant exposure leads to irritability and anxiety, which are contributing risks for cardiovascular disease, said Dr Vikrant Veeranna, interventional cardiologist, Fortis Hospital.

"Constant exposure to noise can result in an increase in the production of cortisol (a steroid hormone), which can increase cardiovascular risk. Lack of sleep and sleep disturbances due to noise are also risk factors. In Europe, researchers found that people whose bedrooms face a main road have 1.2% higher risk of heart ailments than those with quiet rooms," said Dr Veeranna.

In 1999, a World Health Organization study concluded that noise above 6dB is a cause for major cardiovascular risk, said Dr Adil Sadig, head of cardiothoracic surgery, Sakra Hospital.

"There are direct and indirect effects of noise on human health. Indirectly, it leads to fatigue, rage and decreased sleep. Directly, it leads to sudden increase in the production of cortisol hormone, which increases blood pressure and affects the arteries of the heart. Exposure to noise higher than 60-70dB is harmful. Some of the European studies have shown that those who live close to airports are more vulnerable to cardiovascular diseases than others," he said.



CINEMA OF THE WEEK

Ice Age: Collision Course (Animation/Adventure) ★★★½
Cast: [Voices] Simon Pegg, Stephanie Beatriz, Denis Leary, Robert Cardone, Neil deGrasse Tyson, Adam Devine, Jesse Tyler Ferguson, John Leguizamo, Ray Romano, Jennifer Lopez, Keke Palmer, Queen Latifah, Wanda Sykes
Direction: Galen T Chu, Mike Thurmeier
Duration: 1 hour 36 minutes
Language: English (U)
58888 code: ice



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• **Ice Age: Collision Course (ice)**

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you'd find yourself perking up again.

And there are plenty of the antics of the latter three to enjoy here. There are quite a few sidekick characters—deBuck Weasel (Tyson), two loony opossums, Granny (Sykes), Shangri Llama (Jesse Tyler Ferguson) to name a few—who also liven things up, adding to the entertainment factor for kids. Oh, and do stay back for the post-credits scene.

Collision Course is a relentless, fun-filled, fast-paced and most recent part in a long-running series that is pretty much sure to keep the kids (the audience for this movie) entertained with its energy.

— Reagan Gavin Rasquinha

in his grasp for a few seconds. It's a delight to watch him.

And the other easy highlight of this movie is Buck; a completely bonkers one-eyed weasel whose madness is balanced with genius. After all, it's Buck who comes up with the grand plan to save the planet.

Manny, however, is bothered more about family matters and his daughter's upcoming marriage. For him, the end of the world isn't as pressing an issue. The mammoths unfortunately happen to be pretty dull to watch this time. So when the action shifts back to Sid, Buck and Scrat,

that's it.

— Reagan Gavin Rasquinha

How discussion on plane led to an invention — a waterproof polymer

TIMES NEWS NETWORK

Bengaluru: It happened a while ago. Prof Srinivasan Raghavan from the Centre for Nano Science and Engineering (CNSE) of Indian Institute of Science (IISc) and his colleague Prof Praveen Ramamurthy from the department of material engineering were on an airplane.

As their journey began, Raghavan initiated a discussion on graphene (a form of carbon) in his lab. "We were discussing how graphene is impermeable even to helium," Raghavan said.

They chatted about making paper impermeable to wa-

ter. The duo then agreed to first try it with plastic. Though plastic is supposed to be waterproof, for those working on organic electronics, the average plastic or polymers are not waterproof enough

ter. They then agreed to first try it with plastic. Though plastic is supposed to be waterproof, for those working on organic electronics, the average plastic or polymers are not waterproof enough.

"The composite packaging in which mango juices are stored has a water vapour permeation rate of 0.0001 gm/m² per day. The plastic, however, lets water through at a much higher rate of 1 gm/m² per day. At this rate, the chips and juice packaging we use are not waterproof. Plastics for electronics and pharmaceutical packaging need to be a million times lower in water vapour permeation," reads a note from IISc.

Taking the discussion forward, Raghavan and Praveen developed a moisture-impermeable polymer using the graphene. The new polymer

is expected to address the challenge of permeation of atmospheric water vapour into flexible organic electronic devices, improving performance. "In about a week after we had the talk, we came out with our first result, and very soon the patent was submitted," Raghavan said.

The polymer is flexible, transparent and moisture impermeable. The researchers used it to develop large-area composite films with almost negligible water permeation. They performed transparency and flexibility tests on the films and found they were almost as transparent as other available polymer films.

Falling boulders near Kali bridge pose risk to road users

Karwar: Increasing cases of people being injured by rolling boulders on NH 66 from Sadashivagad Hill, adjacent to Kali Bridge, have raised concerns among road users. One side of the rocky hill is being demolished to broaden the national highway into four lanes.

On Thursday, one more biker was reportedly injured when a boulder came rolling down. He was heading towards Sadashivagad from Karwar. Luckily, the boulder fell in front of his bike. He fell down from his vehicle and suffered minor injuries and high variation in blood pressure.

As many as 86 houses were damaged on Thursday and the loss is estimated at Rs 13.38 lakh. With this, the number of houses damaged in the district went up to 647.

The hill is situated between Karwar and Sadashivagad on NH 66 that connects Karwar with Goa and Mumbai. Every day thousands of vehicles ply on the road and people, including schoolchildren, pass through the stretch.

The NH is being converted into four lanes and the left part of the hill on the banks of Kali river is being cleared amid stiff resistance by locals. There are against blasting on the hill, which was once visited by Shivaji Maharaj and helped British rulers to repulse the repeated attacks by the Portuguese from Goa.

However, despite opposition, blasting of boulders on the hill is in progress since the past six months. TNN

Parents allege harassment of kids, school denies it

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We are struggling to make ends meet. Our paltry pay doesn't allow us to meet these requirements. Since we haven't been sending food prescribed by the school, the authorities have been harassing our kids. Moreover, we can't cook different items for differ-

ent family members every day," said a parent, echoing the views of his ilk. Denying allegations of harassment, the principal said the diet plan has been a part of the school since its inception.

Though many schools recommend diet plans, whether they impose them on parents



WHAT'S ON THE PLATTER

Day	10.20am-10.40am	12.30pm-1.10pm	2.30pm-2.40pm
Monday	Sprouts (boiled/soaked)	Idli/dosa with chutney/curry	Banana/other fruit
Tuesday	Cooked vegetables	Chapati/puri with greens	Banana/other fruit
Wednesday	Vegetable upma	Cooked rice	Banana/other fruit
Thursday	Cucumber and grated carrot	Ragi dosa/ragi roti/poha	Banana/other fruit
Friday	Fruit salad and dry fruits	Stuffed paratha with curd	Banana/other fruit
Saturday	Items of students' choice (vegetarian)		

Family friend arrested for double murder

Bengaluru: A 26-year-old man has been arrested for the murder of an elderly couple at their Vinayakanagar home on July 3.

Muniappa, 68, and his wife Varalakshmi, 61, were found with their throats slit. There were no signs of a forced entry, which showed the assailant was known to the victims. According to police, the accused Venkatesh Kumar is a resident of Yelahanka New Town and was known to the couple through Nishanth, a childhood friend of the couple's third son, Prithviraj. He was in debt.

"Since Prithvi was settled in Visakhapatnam and his two brothers lived in far off parts of Bengaluru, he had requested Nishanth to frequently visit his parents. Sometimes, he would take Venkatesh along," police said. Seeing the couple was living alone, he hatched the plot, police added. TNN

The family brought the issue to the district health officer's notice, seeking action against the lab. When Jamadar confronted laboratory officials, they admitted to the lapse and claimed a faulty medical kit would have thrown the HIV result in a routine blood test. He is contemplating filing a case against the lab.

Haveri district surgeon Mahesh Badni blamed the lab for the horrendous mix-up. District health officer Sunil Chandra Avaradi held the lab responsible for the goof-up, and said no hospital or medical facility informs a patient of HIV test results. He said his department will conduct a probe into the incident and punish the guilty. A technician from the Haveri lab who didn't wish to be identified apologized for the mistake.

The worried couple went to a private lab in Haveri on Monday. Thanks to a mix-up by the lab, the woman received a report that declared her HIV positive. The Jamadar family was too shocked to rush to another lab for a second test.

"I was traumatized and found it extremely difficult to convince my wife that we can seek a second opinion. She was depressed, spoke of committing suicide by hanging as she didn't want to live with the stigma of HIV. I made several attempts to keep hope," Sayad pointed out.

That was when the couple decided to seek the counsel of family friend Khader. He suggested an immediate second test and reprimanded Jamadar's wife for contemplating

Obituary, Condolence and In memoriam messages will be published at a cost of Rs. 800/- for five lines extra line Rs. 160/- (without photo) and Rs. 425/- per sq. cm (with photo). Messages accompanied with Death Certificate should be sent to Times Classifieds before 7.30 pm at 401, M.G. Road, Bangalore - 560 001. For details contact Ph : 42200017 / 42200016.

*Please note obituary ads on Sunday are accepted only between 5.30 pm to 7.30 pm.

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