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# *news* **bulletin** *Library*



# NEWS BULLETIN

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THE HINDU

## A booster shot of self-efficacy

FEBRUARY 05, 2022 13:18 IST  
Aruna Sankaranarayanan



### Believing that you can, makes a huge difference

While disrupting and upending lives across the planet, the pandemic revealed our almost pan-human tendency to want to exercise control over our daily lives. The sudden lockdowns sabotaged our plans, both significant and small. Whether it was going to the grocery store or writing the Board exam, everything depended on forces outside your control. And,

THE TIMES OF INDIA  
சமயம்  
By: GADGETS NOW

கூகுள் குரோம் அப்டேட்  
பண்ணுங்க... ஆபத்து  
இருப்பதாக அரசு தகவல்!

Abhinesh Ar | Samayam Tamil |  
Updated: 8 Feb 2022, 2:46 pm

கூகுள் குரோம் உலாவியை  
(Google Chrome Browser)  
உடனடியாக புதுப்பிக்க ஒன்றிய  
அரசு அறிவுறுத்தி உள்ளது.



இந்தியத் தகவல் தொழில்நுட்ப  
அமைச்சகத்தின் ஒரு பகுதியாக  
செயல்பட்டு வரும் 'இந்திய கணினி  
அவசர உதவிக் குழு (CERT-In)' கூகுள்  
குரோம் பிரவுசர் (Google Chrome Browser)  
பயனர்களுக்கு மீண்டும் எச்சரிக்கை  
விடுத்துள்ளது. அதாவது 98.0.4758.80.க்கு  
முந்தைய பதிப்பைப்  
பயன்படுத்துபவர்களுக்கு இந்த  
எச்சரிக்கை எனத் தெரிவித்துள்ளது.....

Continued in page No.23

that's one reason why angst and anxiety ballooned across the globe.

Way back in 1995, Albert Bandura, a renowned psychologist at Stanford, wrote that our lack of control over adverse events in our life "breeds apprehension, apathy or despair." Further, he avers that our beliefs in what we can control are more potent than objective facts in terms of our "motivations, affective states, and actions" (Self-efficacy in Changing Societies).

### **Mastery experiences**

Personal efficacy refers to "beliefs in one's capabilities" to plan, manage and execute actions relating to one's life. One of the surest ways to develop a robust sense of efficacy is by "mastery experiences." The writer who plods away, word by word, on a massive tome; the designer who ensures that the cut and finish are just right; and the scientist who reframes and refines her hypothesis as new data emerges exhibit high levels of self-efficacy.

Undoubtedly, mastery experiences don't happen overnight. Rather, a person has to acquire an arsenal of skills that span the domains of thought, action, and emotion. Bandura believes that a sense of efficacy is enhanced when people persevere and problem-solve their way through trying circumstances. Additionally, people are also inspired when they see relatable role models succeed under strenuous circumstances.

A third way is by social persuasion. When people are told that they have the necessary skillsets to succeed in a field, they are more likely to persist. Self-doubt, on the other hand, can stymie a person's growth. But it is easier to undermine people's beliefs in themselves than it is to boost their sense of efficacy. According to Bandura, "efficacy builders" don't simply praise individuals for their work; instead, they coax them to cultivate their own internal standards of success by focusing on self-improvement as opposed to comparisons with others.

A fourth way by which people gauge their efficacy is through "their physiological and emotional states." Signs of fatigue or stress can lower a person's sense of efficacy. So, by engaging in self-care — of our bodies and mind — can bolster our perception of our capabilities.

### **Challenging goals**

Bandura argues that efficacy beliefs manifest as "cognitive, motivational, affective, and selection processes." People with high levels of efficacy tend to set more challenging goals for themselves because they think they have the skillsets to meet the demands. Those with a high sense of efficacy are more likely to imagine successful outcomes, thereby propelling them to strive harder. They are also likely to engage in problem-solving when they encounter obstacles.

Efficacy beliefs also impact people's motivation or their willingness to attempt and persist on tasks, especially when the going gets tough. Further, those with high levels of self-efficacy exhibit greater resilience by rebounding from setbacks more quickly and easily. They tend to act or behave in ways to reduce the impact of the stressors in their lives and are 'bolder' in dealing with negative pressures and more likely to alter their situations "to their liking."

As we brace ourselves for a third COVID-19 wave in India, we need to give ourselves a booster shot of self-efficacy. While we may not be able to predict and plan the minutiae of our lives, there are a number of facets we can still control. Foremost, by maintaining a positive mindset and taking all the necessary precautions, we may continue trying to garner "mastery experiences" in whatever field we are pursuing.

*The writer is the author of Zero Limits: Things Every 20-Something Should Know and blogs at [www.arunasankaranarayanan.com](http://www.arunasankaranarayanan.com)*

## RT-PCR: Cycle threshold value does not hold clinical relevance

FEBRUARY 05, 2022 20:47 IST

Lancelot Pinto

**A survey of 700 labs in the U.S. found that the Ct values could vary by up to 12 cycles for the same target gene across labs**

The art of medicine is taught by the bedside. It involves detailed history-taking, followed by a physical examination which employs the senses of the physician. Humans, however, prefer concrete numbers to abstract skill and intuition. Unfortunately, most of these numbers do not have any clinical relevance. Yet, they continue to be used indiscriminately to drive irrational and often expensive treatments, including unnecessary hospitalisations. At present, the most often repeated number appears to be the cycle threshold value (Ct value) reported on an RT-PCR at the time of diagnosis.

## CSIR-CCMB to collaborate with Institut Pasteur

HYDERABAD, JANUARY 25, 2022 19:54 IST

**Research for precision and personalised medicines**

Council of Scientific & Industrial Research (CSIR) through the Centre for Cellular & Molecular Biology (CCMB) will be collaborating with Institut Pasteur (France) in specific health research

fields, including genomics of inherited diseases, which will lead to precision and personalised medicines.

A Memorandum of Understanding (MoU) was signed between CSIR Director general Dr. Shekhar Mande and Institut Pasteur president Prof. Stewart Cole on Tuesday to take the initiative forward. The question of infectious diseases and their ability to re-emerge, better understanding of antimicrobial resistance and research in the development of new models for drug screening are the other areas of collaborative research being planned.

The pact is a follow up of Prof. Cole's visit to CSIR-CCMB in January 2020 here when scientists of both research institutes had decided to collaborate on the subjects mentioned above. This is also a joint effort to tackle potential new global health threats that could surface in future, said an official release.

The new collaboration perfectly fits with France Healthcare Innovation 2030 program whose overall ambition is to make it a leading European nation in terms of healthcare innovation and sovereignty, particularly in terms of biomedical research, clinical trials and, more generally, disruptive innovations in the health sector.

This is through the development of biotherapy and support for specialist healthcare start-ups in order to achieve "a medicine that is more predictive, more preventive and more innovative. Such an ambitious plan would not be realistically achieved without intense and fruitful international research collaborations", said the release.

The hybrid event was witnessed by Ambassador Emmanuel Lenain and Director General for Research and Innovation at the Ministry of Higher Education, Research and Innovation Claire Giry and others.

Institut Pasteur is a non-profit private foundation dedicated to the study of biology, micro-organisms, diseases, and vaccines. For over a century, it has been responsible for discoveries to control diseases such as diphtheria, tetanus, tuberculosis, poliomyelitis, influenza, etc. It is located in 25 countries. CSIR – CCMB has also demonstrated very important achievements, for instance a collaboration leading to a low cost vaccine against Hepatitis B, said the release.

## The Indian EXPRESS

### Has your child tested positive for Covid-19? Follow these measures for better health, immunity

If your child is currently well enough to be taken care of at home, here are some measures you must take to ensure their good health and immunity, as suggested by Ayurvedic expert Dr Nitika Kohli

By: [Lifestyle Desk](#) | New Delhi |  
Updated: February 8, 2022 10:02:12 am



Resting, staying hydrated and sleeping are typically helpful. (Source: Pexels)

As [Covid-19](#) cases continue to rise, people perpetually remain worried for their health and immunity. While children remained the least affected during the first two waves, an

increasing number of kids are getting infected by the virus in the third wave.

To manage [Covid-19](#) in kids, the Health Ministry also released guidelines last month. However, if your child is currently well enough to be taken care of at home, here are some measures you must take to ensure their good health and immunity, as suggested by [Ayurvedic expert Dr Nitika Kohli](#).

“The good news is that most people with Covid-19 have mild symptoms and recover on their own. Resting, staying hydrated and sleeping are typically helpful,” she said. Take a look.

Follow these measures if your child has tested positive for Covid-19.

#### Nutritious diet

The expert suggested to “give your child a light [home-cooked diet](#) and keep them well hydrated.”

#### Tepid sponging

During Covid-19, your child is most likely to have a fever. In such cases, you can do tepid [sponging](#).

#### Good hygiene

Ensuring good hygiene is quintessential to a healthy body. Thus, follow good hygiene practices like regular handwashing with soap.

#### Keep an oximeter handy

Temperature and oxygen saturation may fluctuate during Covid-19 and thus, you must keep an oximeter handy. Make sure you record temperature and oxygen saturation with a [pulse oximeter at home](#), every six hours.

## Isolate your child

It is absolutely necessary to isolate your child in case of Covid-19 infection.

## Wear mask

Dr Kohli said, "You and your child should wear a surgical mask and change it after eight hours of continuous wear."

## Protective measures

You must strictly adhere to personal protective measures for yourself and your child, she suggested.

## Consult a doctor

It is recommended to take medical advice before giving any medicine to your child.



## Karnataka: ICMR-approved labs to send 10 per cent of all positive samples for whole genome sequencing

On Monday, Karnataka logged 6,151 fresh Covid-19 cases, of which 2,718 were reported in Bengaluru alone. The state currently has 87,080 active cases.

By: [Express News Service](#) | Bengaluru | February 7, 2022 10:19:36 pm

With the Union health ministry asking the state to conduct a special genome sequencing surveillance of [Covid-19](#) samples, the Karnataka

government has asked ICMR-approved labs to send 10 per cent of all positive samples to the district hospital labs or government medical college labs for WGS between February 2 and February 28. Notably, Karnataka has been given a target of conducting genome sequencing on 10,000 samples this month.



The ICMR, in a reply, told the court that 134 labs -- 35 government and 99 private -- in Delhi have been approved as of August 16 for conducting Covid tests. (Representative image)

At present, Whole Genome Sequencing (WGS) is carried out on 15 samples from each district once in a fortnight. All districts in Karnataka are mapped to five INSACOG-approved Genome Sequencing Laboratories (GSL).

'Samples of patients with international travel history (irrespective of [CT value](#)), representative samples from clusters/focal outbreaks with severe morbidity and/or mortality, seriously sick, hospitalized patients and Covid-19 re-infection cases are to be sent for the WGS. Samples of positive individuals who have been vaccinated with two doses and have completed 15 days after the second dose and samples from Covid-19 death cases have to be tested,' an order from the state health department stated.

"All the samples received at District Hospital laboratories/Government Medical College labs should be sorted/confirmed and arranged in a sequence according to the meta data shared by the RT-PCR lab and the meta-data of these samples should be shared with the district

surveillance officer (DSO) concerned for updating the same on the Integrated Health Information Portal (IHIP)..." the order signed by state Health Commissioner D Randeep read.

On Monday, Karnataka logged 6,151 fresh Covid-19 cases, of which 2,718 were reported in Bengaluru alone. The state currently has 87,080 active cases. Whereas the positivity rate is 6.19 per cent. Karnataka also recorded 16,802 recoveries and 49 fatalities during the day.



## Spread of Omicron variant lowers Covid CFR to 0.1%

As per an analysis by the state health department, in 2020, which is marked as the first wave, 19,44,789 patients contracted Covid-19.

Written by [Rupsa Chakraborty](#) | Mumbai |  
February 5, 2022 5:46:08 am



Vaccination drive in Thane on Friday. (Express/Deepak Joshi)

Despite the high transmissibility of the [Omicron](#) variant of [Covid-19](#) in the third wave of the pandemic, the case fatality rate (CFR) – proportion of deaths among all infected individuals – was only 0.1 per cent last month,

which is substantially lower than the previous two waves.

As per an analysis by the state health department, in 2020, which is marked as the first wave, 19,44,789 patients contracted Covid-19. Among them, 53,422 succumbed, which comes to a CFR of 2.75 per cent. In 2021, due to the spread of Delta variants that are more deadly, the state witnessed the second wave, in which 47,51,341 people contracted Covid-19. Among them, 85,984 died at a CFR of 1.81 per cent. Last month, with the advent of Omicron, which dominated over the [Delta variant](#), the third wave struck Maharashtra. In all, 9,95,474 people contracted Covid-19. Among them, 950 died and the CFR stood at 0.1 per cent.

Last month's CFR was even lesser than December 2021 when the daily caseload was stable. Of the 43,759 detected Covid-19 cases in December, 233 patients died at a CFR of 0.53 per cent.

According to the data, between December 3-9, 2021, when the third wave was yet to hit the state with its full might, the weekly CFR was 1.27 per cent with 64 deaths, among the 5,052 detected cases.

However, with the spread of Omicron, the weekly CFR gradually started dropping. For instance, between December 10-16, the CFR was 0.82 per cent with 43 deaths, which dropped to 0.76 per cent between December 17-23 with 49 deaths. In the next seven days, it plunged to 0.27 per cent between December 24-30, when 47 deaths were recorded. It was the lowest weekly CFR recorded in 2021.

"Over 60 per cent of the deaths recorded in the third wave was among patients with comorbidities. Only 58 patients were asymptomatic but they later deteriorated," said Dr Avinash Supe, in charge of the Covid-19 death committee. Doctors believe that as Omicron started replacing the Delta variants in

the third wave, it caused fewer severe infections, and the number of deaths started declining.

“Omicron causes a lot of upper respiratory symptoms such as cold and flu, without much involvement of the lungs... it has decreased the dependency on oxygen. So, the fatality rate was much less in the third wave,” said Dr Shashank Joshi, member of the state Covid-19 task force.

Last month, the highest CFR was recorded in Sindhudurg. Of the 3,604 cases, 35 deaths or a CFR of 0.97 per cent was recorded. This was followed by Solapur Municipal Corporation, which reported 0.53 per cent CFR, with 19 deaths reported among 3,617 cases. Ratnagiri recorded 0.38 per cent CFR with 17 deaths among 4,428 cases. Then came Satara, where 74 died among the 22,498 patients with a CFR of 0.33 per cent. Data also showed that in 2020, the CFR was 3.79 per cent in Mumbai, which dropped to 1.05 per cent in 2021. Last month, when the city hit its peak in the third wave, the CFT stood at 0.09 per cent. Like the second wave, most deaths were reported in the age group of 71-80 years. “This again highlights the need to take booster shots, which will help to strengthen immunity, especially among those having comorbidities,” said Supe.

## **The Indian EXPRESS**

### **Deluge of medical waste is swamping the globe, U.N. report says**

**The thousands of tons of extra garbage — discarded syringes, old test kits and used vaccine vials — has strained waste management systems and is threatening both**

**human health and the environment, the World Health Organization said this week.**

By: [New York Times](#) | New York |  
February 4, 2022 10:30:47 pm



*A worker in PPE carrying bio waste outside covid hospital at Civil hospital Asarwa on Thursday. Express photo by Nirmal Harindran, 08-04-2021, Ahmedabad*

By Adeel Hassan

A new report from the World Health Organization has highlighted the overabundance of medical waste around the world caused by the [coronavirus](#) pandemic.

The thousands of tons of extra garbage — discarded syringes, old test kits and used vaccine vials — has strained waste management systems and is threatening both human health and the environment, the World Health Organization said this week.

The agency, which is part of the United Nations, said that most of the estimated 87,000 tons of personal protective equipment and supplies for coronavirus testing and vaccinations — distributed to countries from March 2020 to November 2021 through a U.N. emergency initiative — has ended up as waste.

In addition, more than 8 billion coronavirus vaccine doses given globally have produced 143 tons of trash in the form of syringes, needles and safety boxes. Some of the waste could expose other people to needle punctures and disease-causing germs, the report said.



"It is absolutely vital to provide health workers with the right PPE," Dr. Michael Ryan, the executive director of the World Health Organization's health emergencies program, said in a statement. "But it is also vital to ensure that it can be used safely without impacting on the surrounding environment."

To combat these problems, the report recommends the use of "eco-friendly" packaging and shipping, along with reusable equipment and products made from recyclable or biodegradable materials.

The report also noted that 30% of health care facilities worldwide could not handle the amount of garbage they were creating even before the pandemic. And that number grows to as much as 60% in the least developed countries. The trash can contaminate the air in nearby communities when it is burned, pollute water and attract disease-carrying pests, the report's authors wrote. They called for increased investment in cleaner waste-treatment technologies and recycling.

Solid waste experts have said that high volumes of personal protective equipment have been misclassified as hazardous. Much of that material is dumped in burn pits because it is excluded from normal trash.

"The report is a reminder that although the pandemic is the most severe health crisis in a century, it is connected with many other challenges that countries face," said Tedros Adhanom Ghebreyesus, the WHO director-general.

The estimate does not include the trash from hundreds of tons of supplies that were not distributed through the U.N., or face coverings and at-home testing kits used by the general public.

## Tamil Nadu: Over 78% kids between 15-18 given at least one shot of Covid vaccine

The health department started administering the Covid-19 vaccines to children on January 3.

By: [Express Web Desk](#) | Chennai |  
February 4, 2022 12:54:32 pm



Students attend a class while wearing masks at a school, in Chennai. (PTI)

Tamil Nadu Health Minister Ma Subramanian on Thursday said 78.49 per cent of children aged between 15-18 have taken at least one shot of a [Covid-19](#) vaccine.

According to the minister, of the total eligible population of 33,46,000, at least 26,26,311 children have taken their first dose and 1,59,679 children have been fully vaccinated.

The health department started administering the Covid-19 vaccines to children on January 3. As the schools have reopened, the government will begin providing vaccines to the students at their school premises itself.

The state government is also conducting 600 camps across the state for the elderly, frontline workers and children between 15-18 years of age.

According to the state government's data, 5,06,050 people are eligible for precautionary doses. Among them, as many as 4,17,908 have taken their shots (82.55 per cent).

### **90.42 per cent of the population have been administered Covid-19 vaccines**

Overall, 9,54,74,779 people have been administered Covid-19 vaccines in the state. As many as 62,64,828 people are due for their first dose, 96,22,615 second. The state had been conducting mega inoculation camps to achieve 100 per cent vaccination.

Meanwhile, Tamil Nadu on Thursday reported 11,993 new Covid-19 cases, pushing the cumulative caseload to 33,87,322. The state also registered 30 deaths taking the toll to 37,666. A total of 23,084 people got discharged in the last 24 hours, leaving 1,66,878 active cases. The total number of positive cases included 12 returnees from other countries and states.

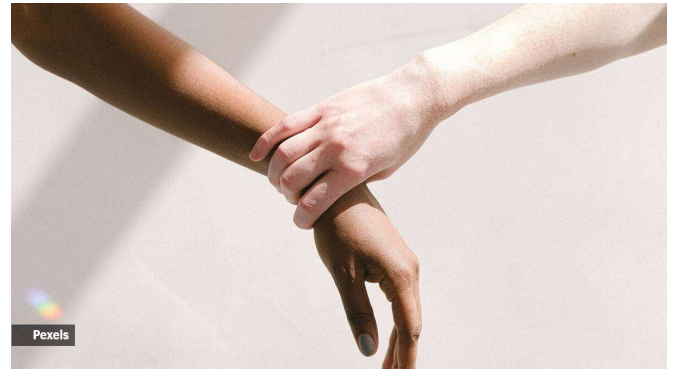
Of the total cases, Chennai recorded 1,751 followed by Coimbatore (1,426), Chengalpattu (1,097), Tiruppur (1,017), Erode (689), Salem (578), Kanyakumari (463), and Tiruvallur (416).



## **How to build resilience in hard times**

**"Normal implies status quo, but things are always changing, and if you don't change, you don't grow. We will never be the same again. The pandemic is epic, a power greater than us, and we have to be flexible, resilient enough to bend in order to survive. And we will survive, but our lives will be forever changed."**

By: [New York Times](#) | New York |  
February 2, 2022 10:30:30 pm



*Resilience is the ability to roll with the punches, "because if you're brittle, you'll break." (Photo: Pexels)*

By Jane E. Brody

Many people I know are waiting, patiently or otherwise, for life to return to normal. We are eager for the day when we can again live without fear of a deadly virus that lurks like a stalker, disrupting social and cultural events, travel, education and life's milestones that once missed, can never be retrieved.

And many people remain crippled by despair over the death of loved ones, as well as lost jobs, businesses, housing, income and even sleep. How, so many of us wonder, are we supposed to cope with so many obstacles blocking our way forward?

One way is to call upon an age-old characteristic that enables us to weather adversity: resilience. Resilience is the ability to roll with the punches, "because if you're brittle, you'll break," said Pauline Boss, professor emeritus at the University of Minnesota and author of the recently published book, "The Myth of Closure." Dr. Boss, a family therapist, educator and researcher, is best known for her [pioneering work](#) on "ambiguous loss," which is also the title of her 1999 book depicting [unresolved, and often unresolvable](#), physical or emotional losses.

"When the pandemic subsides, things will not go back to 'normal'," said Dr. Boss, who at 87 has lived through multiple upheavals, starting with World War II. With all that has happened during

the pandemic, she wrote, “we can’t expect to go back to the *normal* we had.”

In an interview, she told me, “Normal implies status quo, but things are always changing, and if you don’t change, you don’t grow. We will never be the same again. The pandemic is epic, a power greater than us, and we have to be flexible, resilient enough to bend in order to survive. And we will survive, but our lives will be forever changed.”

Resilience allows us to adapt to stress and maintain one’s equilibrium when faced with adversity. “When resilient people are confronted with a crisis that takes away their ability to control their lives, they find something they can control,” Dr. Boss said. “At the start of the pandemic, many people turned to baking bread, home cooking and cleaning out drawers as something they could control. These were functional coping mechanisms.”

However, she added, if people are unable to adapt when faced with a problem they can’t solve, “they often turn to absolute solutions that are dysfunctional, and make statements like ‘The pandemic is a hoax’ and ‘There’s no such thing as this virus.’”

Although resilience is often viewed as an inherent personality trait that people either have or lack, [studies have shown](#) it is a characteristic that can be acquired. People can adopt behaviors, thoughts and actions that [help to build resilience, at any age](#).

Dr. Boss reassured parents that their children will be all right, despite pandemic-related academic and social disruptions. “Children are naturally resilient, and they will be stronger for having survived this bad thing that happened to them. They’ll bounce back and grow from it.”

More than children, “we need to focus on adults,” she said. “This generation of parents has faced no world war, no global threat” of this

scale. Many parents are struggling, though she worries that some may be over-shielding their children, which can erode their natural ability to solve problems and cope with adversity.

Dr. Boss’s sentiments brought to mind the concerns my husband and I had in 1980, when our 10-year-old twin sons were facing enrollment in a public middle school where rampant misbehavior and physical threats were common. The boys declined our offer to send them to private school for those tumultuous three years, saying, “What would we learn about life in private school?”

### **Moving forward**

In her new book, Dr. Boss offers guidelines for increasing one’s resilience to overcome adversity and live well despite painful losses. She quotes Dr. Viktor E. Frankl, an Austrian neurologist, psychiatrist, author and Holocaust survivor, who wrote, “When we are no longer able to change a situation, we are challenged to change ourselves.” She recommends that people use each guideline as needed, in no particular order, depending on the circumstances.

**Find meaning.** The most challenging guideline for many people is to find meaning, to make sense of a loss, and when this is not possible to take some kind of action. Perhaps seek justice, work for a cause or demonstrate to try to right a wrong. When Dr. Boss’s little brother died from polio, her heartbroken family went door to door for the March of Dimes, raising money to fund research for a vaccine.

**Adjust your sense of mastery.** Instead of trying to control the pain of loss, let the sorrow flow, carry on as best as you can and eventually the ups and downs will come less and less often. “We do not have power to destroy the virus, but we do have the power to lessen *its* impact on us,” she wrote.

**Rebuild identity.** Also helpful is to adopt a new identity in sync with your current circumstances. When Dr. Boss's husband became terminally ill, for example, her identity shifted over time from being a wife to being a caregiver, and after his death in 2020, gradually trying to think of herself as a widow.

**Normalise ambivalence.** When you lack clarity about a loss, it's normal to feel ambivalent about how to act. But Dr. Boss says it's best not to wait for clarity; hesitation can lead to inaction and puts life on hold. Better to make less-than-perfect decisions than to do nothing.

**Revise attachment.** Dr. Boss emphasizes that rather than trying to sever your attachment to a lost loved one, the goal should be to keep them present in your heart and mind and gradually rebuild your life in a new way, with a new sense of purpose, new friends or a new project. Accept the reality of the loss and slowly revise your attachment to the person who died. But, she says, "there is no need to seek closure, even if other relationships develop."

**Discover new hope.** Begin to hope for something new that enables you to move ahead with your life in a new way. Stop waiting, take action and seek new connections that can minimize isolation and foster support that in turn nurtures your resilience.

Perhaps Dr. Boss's most valuable advice when faced with pandemic losses: "What we need to hope for is not to go back to what we had, but to see what we can create now and in the future." She suggests brainstorming with others and being willing to try new things. "Hope for something new and purposeful that will sustain you and give you joy for the rest of your life."

## How Covid-19 social isolation impacted development of children, finds new study

The study investigated the impact of Covid-19 related social isolation measures on 2,200 young infants and toddlers. The findings provided insights into the effects of lockdown on language acquisition and screen time in youngsters growing during this extraordinary period.

Published on Feb 08, 2022 10:43 AM IST



*How Covid-19 social isolation impacted development of children, finds new study(Pexels)*

Covid-19 forced children to stay isolated and indoors for more than a year. The [precious formative years of a child](#) are for it to explore, touch, hear, speak, feel and see things, outside their home. This opportunity, unfortunately, was snatched from them. Now, a recent study has shed light on the impact of isolation on children.

The study was published in the journal 'Language Development Research'.

The study, led by the University of Oslo, was an international consortium with researchers from 13 countries which investigated the impact of Covid-19 related [social isolation measures on 2,200 young infants and toddlers](#) between 8 and

36 months of age. Their findings provided insights into the effects of lockdown on language acquisition and screen time in the generation of youngsters growing up during this extraordinary period.

A second study on the increase in screen-time during lockdown and its impact on language development, led by the University of Gottingen with the Max Planck Institute for Psycholinguistics in Nijmegen and the University of Applied Sciences and Arts Western Switzerland, was published in the journal 'Scientific Reports'.[.covid](#)

Shortly after lockdown began in early March 2020 across 13 countries, parents were asked to complete an online questionnaire containing questions on the child's age, exposure to different languages, number of siblings and vocabulary development. Parents were then [contacted again at the end of the lockdown](#) (for that family or in that area, in general).

They were asked about the activities that they undertook with their child during lockdown, the amount of time their child had access to screens both during lockdown and before, as well as questions on how much screen time they typically had themselves and their attitudes towards children's screen time. Parents were also asked to complete a standardized vocabulary checklist indicating the number of words their child understood and/or said at the beginning, and again, at the end of lockdown so that an increase in the number of words gained over lockdown could be calculated.

The studies found that, during lockdown, children who were read to more frequently were reported by their caregivers to have learned more words, relative to their peers who were read to less frequently. However, children with increased exposure to screens learned to say fewer words, relative to their peers with less screen time.

In addition, while children were exposed to more screen time during lockdown than before, overall, children were reported to have gained more words than expected during lockdown, relative to pre-pandemic levels. The increase in screen time during lockdown was greater if lockdown was longer, and in families with fewer years of education, and where parents reported using screens for longer themselves.

"Identifying the effects of parent-child activities on the child's vocabulary growth is a significant finding, given that we assessed changes in children's vocabularies over an average period of just over one month in our study," said Professor Julien Mayor, University of Oslo.

"While this suggests that the relatively short isolation did not detrimentally impact language in young children, we should be cautious in assuming this would apply during normal times or to longer lockdowns, given the extraordinary circumstances that children and their parents faced during this time", added Associate Professor Natalia Kartushina, University of Oslo.

Indeed, the authors attributed increased screen time precisely to the unprecedented circumstances that families found themselves in during lockdown, including but not limited to the closure of day care centres, sport facilities and play groups for children.

"Many caregivers were in the novel situation of caring for and entertaining their young infants at home all day without recourse to other activities and in addition to their other responsibilities. Allowing your child increased screen time is an understandable solution to this unprecedented situation, in which caregivers were juggling multiple responsibilities - meetings at work or chores that require concentration, together with a small child who needs entertaining. We've all done it during lockdown," said Professor Nivedita Mani, University of Gottingen.

The authors suggested, therefore, that it made sense that even young children - who had no online schooling or attendance requirements - had increased screen time during lockdown. Nevertheless, the authors found it reassuring, that despite having increased exposure to screen time during lockdown, children learned more words during the lockdown period in March 2020, relative to before the pandemic. This was potentially due to other activities that parents undertook with their children during lockdown.



## Tuberculosis 2019-2020

Updated 4 February 2022

### Tuberculosis - 2019-20 report on disease occurrence

Due to the COVID-19 pandemic, the 2019 report on tuberculosis has not previously been published. Thus, the present report covers 2019 and 2020.

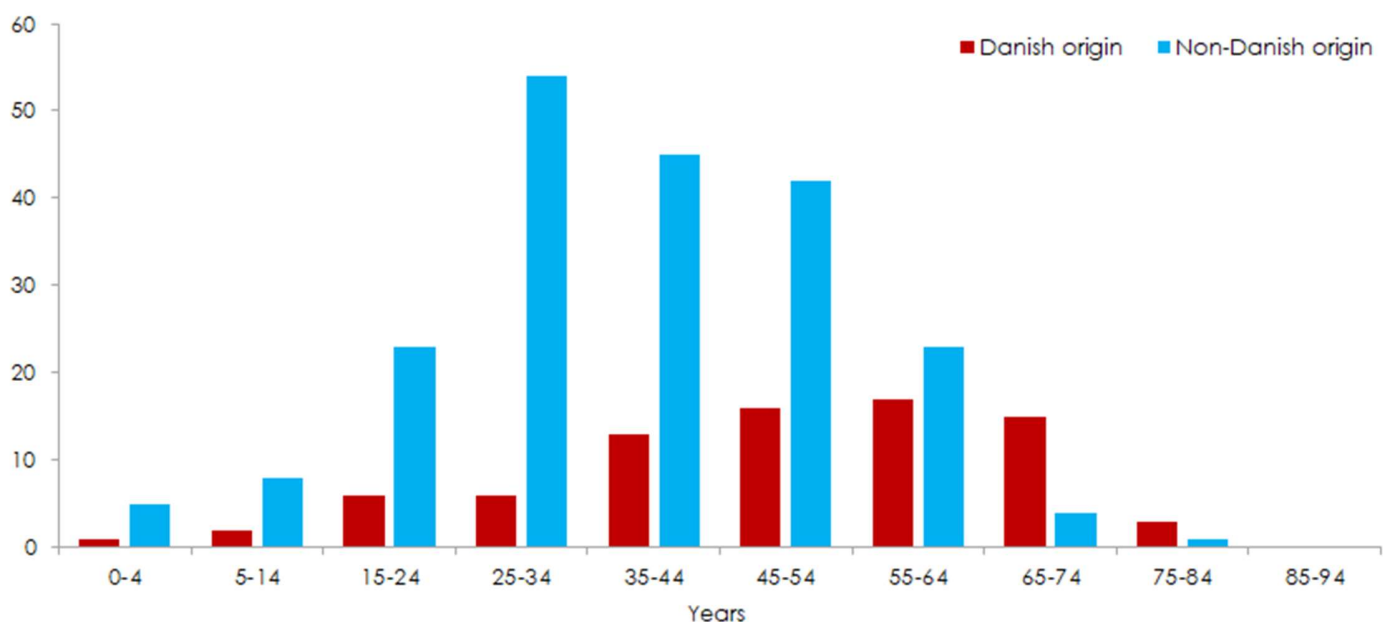
2019 saw a total of 284 notified cases of tuberculosis (TB), 79 (28%) in persons of Danish origin and 205 (72%) in persons of non-Danish origin (immigrants or descendants to immigrants). The total incidence was 4.9 per 100,000.

2020 saw a total of 221 notified cases of tuberculosis, 62 (28%) in persons of Danish origin and 159 (72%) in persons of non-Danish origin (immigrants or descendants to immigrants). The total incidence was 3.8 per 100,000.

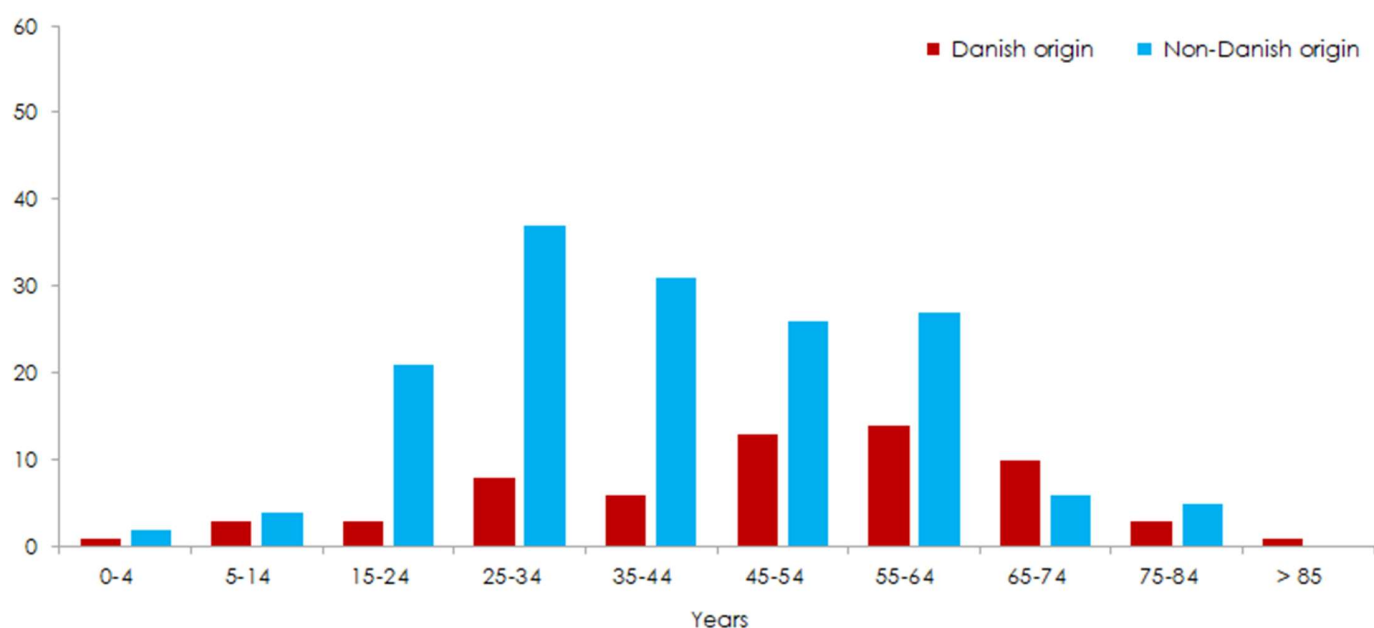
For persons of Danish origin, the median age was 50.5 years (range 0-84 years) in 2019 and 48.5 years (range 0-89 years) in 2020. Among persons of Danish origin, a total of 59 men and 20 women were notified in 2019, and 39 men and 23 women were notified in 2020. Until 2018, the median age followed an increasing trend from 49 years in 2008 to 57 years in 2018, but the two latest years have recorded a marginally lower median age.

For persons of non-Danish origin, the median age was 39 years (range 0-77 years) in 2019 and 40 years (range 1-83 years) in 2020. Among persons of non-Danish origin, a total of 122 men and 83

**Figure 1. Notified tuberculosis cases by age groups and origin, 2019**



**Figure 2. Notified tuberculosis cases by age groups and origin, 2020**



women were notified in 2019, and 88 men and 71 women were notified in 2020. The median age of persons who are not of Danish origin remains at the level observed in 2008.

The difference in median age is due to the fact that among persons of Danish origin, TB is observed mainly in middle-aged and elderly persons, whereas the condition is seen mainly in

**Table 1. Notified tuberculosis cases and incidence per 10<sup>5</sup> in persons of Danish origin and non-Danish origin, by region and area, 2019**

	Danish origin		Non-Danish origin		Total	
	Number	Incidence	Number	Incidence	Number	Incidence
<b>Capital Region of Denmark</b>						
Copenhagen City	13	2.2	51	27.0	64	8.1
Copenhagen subs.	7	1.6	27	21.7	34	6.2
North Zealand	7	1.7	12	21.2	19	4.1
Bornholm	0	0.0	0	0.0	0	0.0
<b>Region Zealand</b>						
East Zealand	2	0.9	7	23.7	9	3.6
West and South Zealand	8	1.5	10	18.5	18	3.1
<b>Region of Southern Denmark</b>						
Funen	8	1.8	23	40.8	31	6.2
South Jutland	7	1.1	16	17.9	23	3.2
<b>Central Denmark Region</b>						
East Jutland	12	1.5	21	19.1	33	3.7
West Jutland	8	2.1	13	30.6	21	4.9
<b>North Denmark Region</b>						
North Jutland	7	1.3	18	34.4	25	4.2
Unknown	0		7		7	
<b>Total</b>	<b>79</b>	<b>1.6</b>	<b>205</b>	<b>25.4</b>	<b>284</b>	<b>4.9</b>

young and younger adults of non-Danish origin, Figure 1 and Figure 2.

Table 1 shows the 2019 distribution by area and origin. Table 2 shows the same data for 2020.

Figure 3 presents the development in TB incidence in persons of Danish origin, by region, in the 2011-2020 period.

**Table 2. Notified tuberculosis cases and incidence per 10<sup>5</sup> in persons of Danish origin and non-Danish origin, by region and area, 2020**

	Danish origin		Non-Danish origin		Total	
	Number	Incidence	Number	Incidence	Number	Incidence
Capital Region of Denmark						
Copenhagen City	7	1.2	31	16.4	38	4.8
Copenhagen subs.	9	2.1	16	12.9	25	4.6
North Zealand	4	1.0	5	8.8	9	1.9
Bornholm	3	8.2	1	34.7	4	10.1
Region Zealand						
East Zealand	0	0.0	1	3.4	1	0.4
West and South Zealand	5	0.9	5	9.2	10	1.7
Region of Southern Denmark						
Funen	12	2.7	10	17.8	22	4.4
South Jutland	5	0.8	22	24.6	27	3.7
Central Denmark Region						
East Jutland	9	1.1	22	20.0	31	3.5
West Jutland	3	0.8	11	25.9	14	3.3
North Denmark Region						
North Jutland	4	0.7	23	43.9	27	4.6
Unknown	1		12		13	
<b>Total</b>	<b>62</b>	<b>1.2</b>	<b>159</b>	<b>19.7</b>	<b>221</b>	<b>3.8</b>

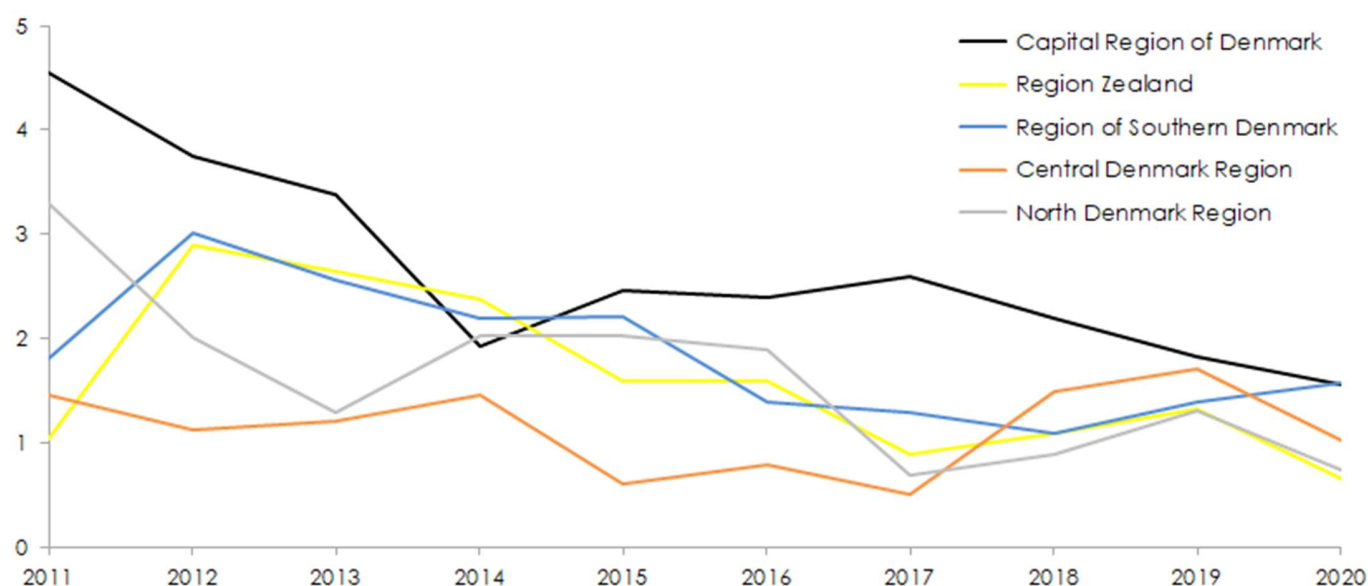
In 2019, the highest incidence (8.1 cases per 100,000, 64 cases) was seen in the City of Copenhagen, followed by Copenhagen subs. (6.2 per 100,000, 34 cases) and Funen (6.2 cases per 100,000, 31 cases). In 2019, the island of Bornholm recorded no tuberculosis notifications. The second lowest incidence was recorded in West and South Zealand (3.1 per 100,000, six cases) and South Jutland (3.2 cases per 100,000, 23 cases).

In 2020, the highest incidence (10.1 cases per 100,000, four cases) was seen on the island of Bornholm, followed by the City of Copenhagen (4.8 cases per 100,000, 38 cases), whereas the lowest incidence was observed in East Zealand (0.4 per 100,000, one case).

All five regions recorded a declining incidence in the 2011-2017 period. Even so, a slight increase was observed in the Capital Region of Denmark in the 2015-2017 period and then a decline was observed from 2017 to 2020. In the Region of Southern Denmark, a decline in incidence was observed in the 2017-2018 period, whereas the 2018-2020 period recorded an increase, leaving the incidence in the Region of Southern Denmark on a par with the incidence in the Capital Region of Denmark in 2020. In the Region of Southern Denmark, TB was more prevalent among persons of non-Danish origin (71 cases from a total of 103 cases in the region) in 2019 and 2020. A total of 27 of the 71 cases of non-Danish origin were Greenlanders.



**Figure 3. Incidence of tuberculosis per 10<sup>5</sup> among persons of Danish origin, by region, 2011-2020**



As from the 2017-2019 period, the incidence in Region Zealand, the Central Denmark Region and the North Denmark Region has followed an increasing trend, whereas the incidence declined in all three regions from 2019 to 2020.

Tables 3 and 4 show the distribution by localisation and origin for 2019 and 2020, respectively.

Overall, for 2019 and 2020, pulmonary TB was the most frequently observed presentation in patients of Danish and non-Danish origin alike. Persons of non-Danish origin more frequently presented with extra-pulmonary types of TB than people of Danish origin, particularly TB of the lymph nodes (glandular TB).

**Table 3. Notified tuberculosis cases by localisation and origin, 2019**

TB localisation	Danish origin		Non-Danish origin		Total	
	Number	%	Number	%	Number	%
Pulmonary*	69	87.3	142	69.3	211	74.3
Pulmonary and other localisation	3	3.8	12	5.9	15	5.3
Pleural	1	1.3	6	2.9	7	2.5
Glandular	4	5.1	21	10.2	25	8.8
Bone (bones and joints)	0	0.0	1	0.5	1	0.4
Bone (spine)	0	0.0	0	0.0	0	0.0
Gastrointestinal	0	0.0	8	3.9	8	2.8
Ear	1	1.3	0	0.0	1	0.4
TB meningitis	0	0.0	2	1.0	2	0.7
Urogenital	0	0.0	3	1.5	3	1.1
Gastrointestinal and urogenital	0	0.0	0	0.0	0	0.0
Urogenital and bone (bones and joints)	0	0.0	1	0.5	1	0.4
Not stated/other	1	1.3	9	4.4	10	3.5
<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>205</b>	<b>100.0</b>	<b>284</b>	<b>100.0</b>

\*Excluding cases of pulmonary TB with a concurrent second location.

**Table 4. Notified tuberculosis cases by localisation and origin, 2020**

TB localisation	Danish origin		Non-Danish origin		Total	
	Number	%	Number	%	Number	%
Pulmonary*	53	85.5	100	62.9	153	69.2
Pulmonary and other localisation	0	0.0	10	6.3	10	4.5
Pleural	3	4.8	8	5.0	11	5.0
Glandular	2	3.2	32	20.1	34	15.4
Bone (bones and joints)	0	0.0	2	1.3	2	0.9
Bone (spine)	0	0.0	1	0.6	1	0.5
Gastrointestinal	2	3.2	2	1.3	4	1.8
Ear	0	0.0	0	0.0	0	0.0
TB meningitis	1	1.6	0	0.0	1	0.5
Urogenital	0	0.0	0	0.0	0	0.0
Gastrointestinal and urogenital	0	0.0	1	0.6	1	0.5
Urogenital and bone (bones and joints)	0	0.0	0	0.0	0	0.0
Not stated/other	1	1.6	3	1.9	4	1.8
Total	62	100.0	159	100.0	221	100.0

\*Excluding cases of pulmonary TB with a concurrent second location.

Overall, in 2019 and 2020, 35 (21 in 2019 (7%) and 14 in 2020 (6%)) patients were notified with TB relapse. Among the cases notified in 2019 and 2020 with TB relapse, 16 were Greenlanders, seven were Danes, four were Somalis, two were from Thailand and one was from Brazil, Eritrea, Ethiopia, China, the Philippines and Vietnam, respectively. For 14 of the 35 patients, the previous TB episode had occurred within the 2015-2018 period.

For a total of 99 (20%) patients, 42 Danes (28 in 2019, 14 in 2020) and 57 persons of non-Danish origin (32 in 2019, 25 in 2020), the notification included information about personal risk factors in the form of other chronic conditions, cancer, homelessness, alcoholism or other contact to a risk environment. As previously, it is estimated that risk factors are under-reported in the notifications.

Among the cases notified in 2019 and 2020, information was available about concurrent HIV infection and therefore AIDS for 11 (2.2%) patients; one of Danish origin and the remaining ten of non-Danish origin. In all, among the 505 TB cases notified in 2019 and 2020, 389 patients had tested HIV negative, whereas the HIV status of

the remaining 105 patients was not provided on the notifications and therefore remained unknown. The Danish Health Authority (and international organisations including the WHO) still recommends that all TB patients undergo HIV testing, [EPI-NEWS 46/09](#). This is so because TB outbreaks typically start among people who have become infected with tuberculosis when their immune system is weakened, as is the case for AIDS

### Country of infection and origin

Based on all notifications from 2019 and 2020, a total of 213 (42%) patients had presumably become infected in Denmark, including 117 of Danish origin. In all, 15 persons were born in Denmark, but were of non-Danish origin. A total of 96 (19%) persons of non-Danish origin were presumably infected in Denmark, including 46 from Greenland, nine from Somalia and eight from Pakistan; the remaining 33 cases were from 19 other countries.

Of the 292 (58%) patients who had presumably become infected abroad, 24 were of Danish origin. Hereof, two had presumably become infected in Africa, whereas one had presumably

become infected in Greenland, Indonesia, Niger, Asia and Austria, respectively. The country of infection for the remaining four persons of Danish origin was unknown.

### TB among persons of non-Danish origin

In 2019, a total of 58 TB cases were notified among Greenlanders, whereas 2020 recorded 42 TB cases in this group. This corresponds to a 28% decline from 2019 to 2020. However, it should be noted that a slight increase in the number of notified TB cases occurred among Greenlanders from 2018 to 2019, see Figure 3. Greenlanders residing in Denmark remain the largest group of TB cases, stated as number of cases, among persons of non-Danish origin. In 2019 and 2020, the majority of notified cases among persons of Greenlandic origin were notified from the City of Copenhagen (32 cases), followed by South Jutland (18 cases) and North Jutland (17 cases).

2020, see Figure 4 presenting the TB incidence of selected countries of origin.

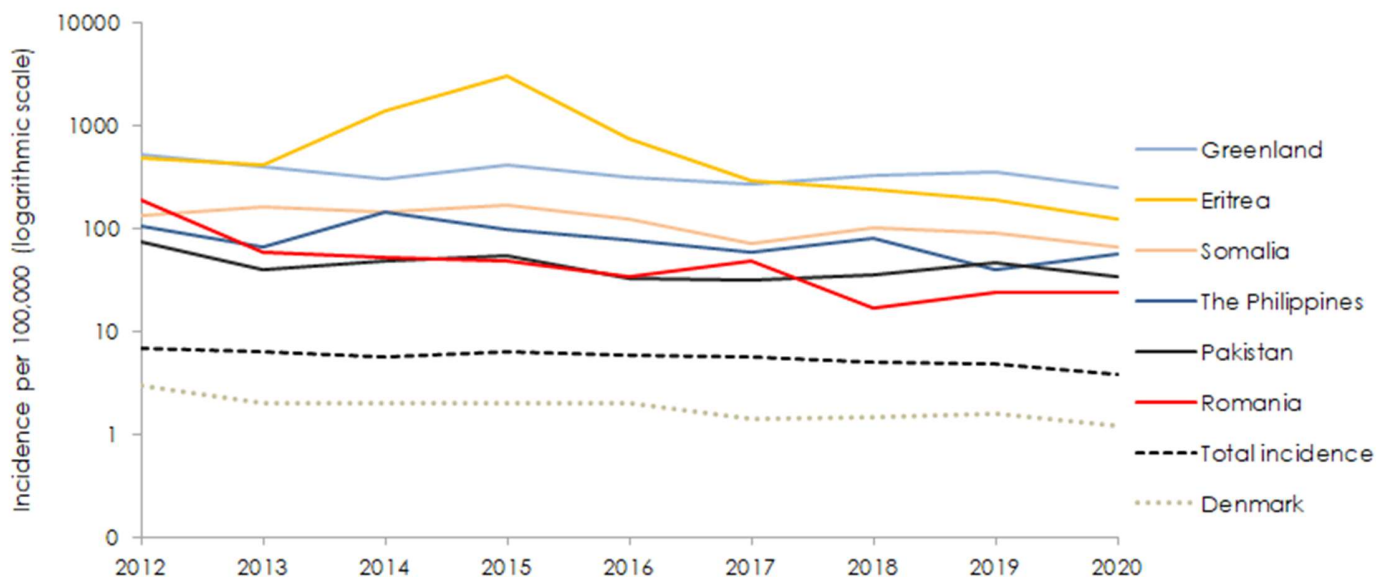
### Occupational transmission

Occupational transmission among notified TB cases in 2019

In 2019, a total of six TB cases had possible occupational infection stated on the notification.

One person had worked as a teacher at Haslev School where a major outbreak occurred in 2018. The outbreak was described in the 2018 annual report ([Tuberculosis - report on disease occurrence 2018](#)). The person's PCR test was positive, but culture was negative. Therefore, genotyping was not possible. The affected person did not have any risk factors for TB infection, and occupational transmission is therefore considered likely.

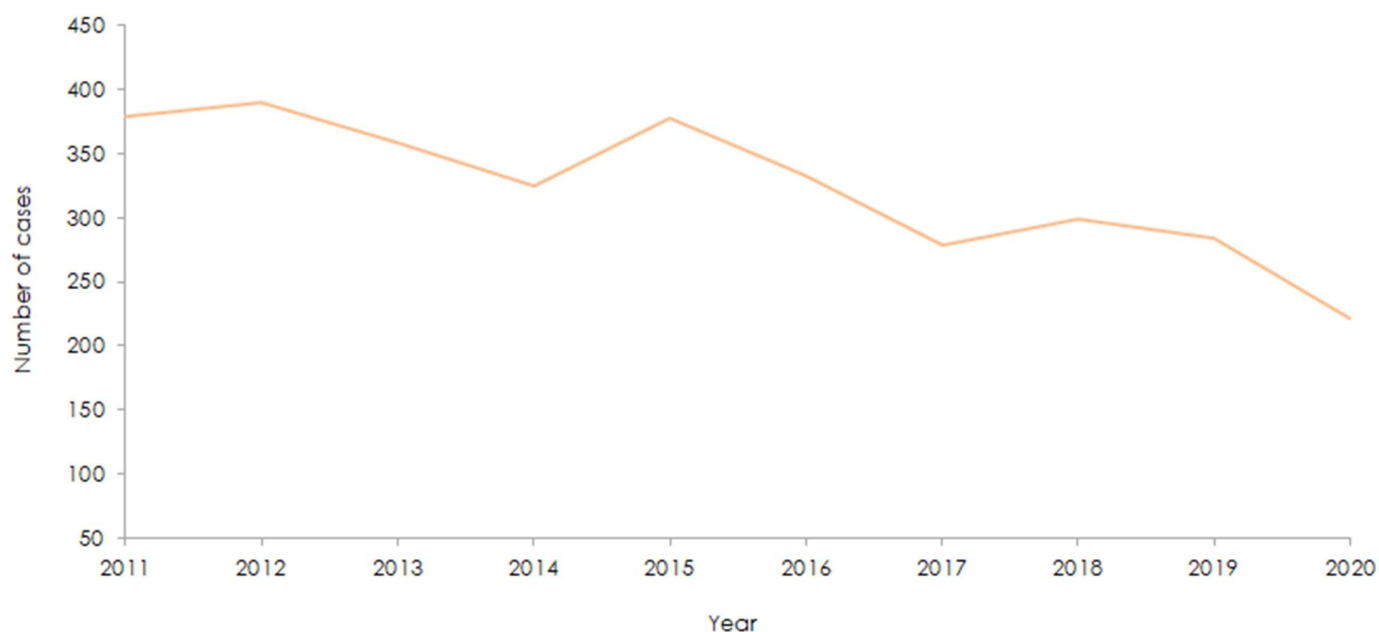
**Figure 4. Tuberculosis incidence per 10<sup>5</sup>, by selected countries of origin and total incidence in Denmark, 2011-2020**



In 2019 and 2020, a total of 13 and nine TB cases were notified among persons from Eritrea. Overall, the number of TB cases from Eritrea followed a declining trend from 2015 through

2020. One persons stated possible transmission via a colleague at a builder's merchant. However, no contact information was available for the colleague in question, and therefore the suspicion of occupational transmission could not

**Figure 5. Notified tuberculosis cases in the 2011-2020 period**



be investigated further. Furthermore, the genotype belonged to the largest infectious chains observed in Denmark; *M. tuberculosis* complex type C2/1112-15 (also coined cluster 2).

One patient stated possible transmission via his/her work with drug users. However, the place of work was not stated in detail, and therefore any occupational transmission could not be investigated further.

One case stated possible occupational transmission via work at a housing service targeting mentally ill residents. The person was immunocompromised, and the genotype belonged to cluster 2. Occupational infection could not be substantiated; nor could they be disproved.

One person stated having become infected via work in a social institution. The diagnosis was maintained based on histology results, and genotyping was therefore unavailable. Thus, occupational transmission could not be further substantiated.

One case stated possible transmission via work at a refuge for battered women and women of

non-Danish origin. In this case, the diagnosis was maintained exclusively on the basis of histology results, why occupational transmission could not be further substantiated.

The notifications of another two cases stated that it remained unknown if occupational transmission had occurred.

In one case, possible occupational transmission through work at a bar was stated. The genotype belonged to cluster 2, why occupational transmission could neither be substantiated nor refuted.

For one person, possible occupational transmission abroad was stated at a homeless shelter or in a refugee camp. The diagnosis was maintained based exclusively on clinical particulars and a positive quantiferon test. Occupational transmission abroad was therefore possible but could not be substantiated.

Occupational transmission among notified TB cases in 2020

In 2020, a total of three TB cases had possible occupational infection stated on the notification.

occupational transmission could not be further substantiated.

One case had worked as a physician in Saudi-

**Table 5. Notified tuberculosis cases, by age group and origin, 2019-20**

Age group	Danish origin			Non-Danish origin		
	2019	2020	Change (%)	2019	2020	Change (%)
0-4	1	1	0.0	5	2	-60.0
5-14	2	3	50.0	8	4	-50.0
15-24	6	3	-50.0	23	21	-8.7
25-34	6	8	33.3	54	37	-31.5
35-44	13	6	-53.8	45	31	-31.1
45-54	16	13	-18.8	42	26	-38.1
55-64	17	14	-17.6	23	27	17.4
65-74	15	10	-33.3	4	6	50.0
75-84	3	3	0.0	1	5	400.0
85-94	0	1	100.0	0	0	0.0
Total	79	62	-21.5	205	159	-22.4

One of these persons was employed as a secretary at a hospital ward where possible transmission was stated via two previously admitted patients in 2011 and 2016. Genotyping of the patient's isolate showed the same genotype as the two cases in 2011 and 2016, respectively. Therefore, occupational transmission is considered probable, either in 2011 or in 2016.

Arabia and Pakistan where occupational transmission may have occurred. The genotype showed a type found in a very limited number of patients in the Capital Region of Denmark. Occupational transmission was therefore possible, but transmission may also have occurred in the Capital Region of Denmark where the patient resided. Therefore, potential occupational infection could not be substantiated any further.

One case worked as a social and healthcare assistant and had provided home-based care to a citizen with active TB. Genotyping showed the same type as the citizen, why occupational transmission is considered probable.

One case worked at a drug rehabilitation centre in the Capital region of Denmark. Furthermore, the person was of Turkish origin. The genotype of this person was seen in a limited number of patients from Turkey and Syria in the Capital Region of Denmark. Occupational infection is therefore possible, but this could not be further substantiated.

One case had worked many years previously as a nurse in a hospital ward where TB patients were admitted. Occupational infection was therefore considered possible, but this could not be further substantiated.

**Outbreaks**

The notifications of another six cases stated that it remained unknown if occupational transmission had occurred.

No major outbreaks were recorded in 2019 or 2020.

Among three of the unresolved cases, no specific place of work was stated, why

## Microbiological trends

In 2019, the TB diagnosis was confirmed by culture and subsequent determination of species in 229 of 284 cases (81%). This constituted an increase compared with 2018 when the corresponding share was 75%. Hereof, 62 of 79 (78%) were confirmed among Danes and 167 of 205 (81%) among immigrants. In one case, the disease was caused by *Mycobacterium africanum*; one by *Mycobacterium orygis*; the rest had classic *Mycobacterium tuberculosis*. In 2020, the TB diagnosis was confirmed by culture and subsequent determination of species in 180 of 221 cases (81%). This was the same share as recorded in 2019. Among the culture-positive cases, 47 of 62 (76%) were confirmed among Danes and 133 of 159 (84%) among immigrants. In two cases, the disease was caused by *Mycobacterium africanum*. Both of these cases were immigrants. The rest had classic *Mycobacterium tuberculosis*.

Among the 55 notified cases in 2019 that were not confirmed by culture, seven (13%) cases had a positive PCR performed at Statens Serum Institut (SSI). Among these seven PCR-positive cases, one was also positive by microscopy. Among the 41 cases notified in 2020 that were not confirmed by culture, seven (17%) cases had a positive PCR. All of these seven PCR-positive cases were negative by microscopy. Negative culture despite positive PCR and/or microscopy may be due to patients having been started on anti-tuberculosis treatment before the culture samples were taken.

According to the disease definition of the European Centre for Disease Prevention and Control (ECDC), 230 (81%) of the cases from 2019 were confirmed, six (2%) were probable cases and 48 (17%) were possible cases. For 2020, a total of 180 (81%) were confirmed cases, 14 (6%) probable cases and 37 (17%) were possible cases.

Among the 225 notified cases of pulmonary TB ( $\pm$  other localisation) in 2019, a total of 188 (84%) cases were verified by culture, including 57 of the 72 (79%) Danish cases and 131 of the 153 (86%) immigrant cases. By microscopy of expectorates from 57 Danes with culture-confirmed pulmonary TB ( $\pm$  other localisation), 24 (42%) tested positive and were thus regarded as infectious. This proportion was 53% in immigrants (70 of 131). Among all 188 cases of culture-verified pulmonary TB, 182 (97%) were tested by PCR at the SSI, of whom 119 (65%) tested positive.

For 2020, 134 (84%) of a total of 160 notified cases of pulmonary TB ( $\pm$  other localisation) cases were verified by culture, including 42 of the 53 (79%) Danish cases and 92 of the 107 (86%) immigrant cases. By microscopy of expectorates from the 42 Danes with culture-confirmed pulmonary TB ( $\pm$  other localisation), 26 (62%) tested positive and were thus, per definition, regarded as infectious. This proportion was 54% in immigrants (50 of 92). Among all 134 cases of culture-verified pulmonary TB, 132 (99%) were tested by PCR at the SSI, of whom 83 (63%) tested positive.

When comparing all notified TB cases in 2019 among Danes with the corresponding number for the previous year, 2019 witnessed a decline in the share of microscopy-positive pulmonary TB and thereby a decline from 48% to 42% in the share of infectious pulmonary TB cases. Among immigrants, an increase from 48% to 53% was observed. The decrease among Danes may reflect that TB patients are diagnosed earlier in their disease course, which may be associated with a more active screening effort in the risk groups, particularly in the Copenhagen area.

A comparison of all notified TB cases in 2020 with the corresponding number for 2019 shows that 2020 witnessed an increase in the share of microscopy-positive pulmonary TB and thereby an increase in the share of infectious pulmonary TB. The increase was primarily seen among

Danes; from 42% to 62%. A more limited increase was observed among immigrants; from 53% to 54%. In connection with the SARS-CoV-2 and ensuing lock-down of countries, a considerable decline was observed all over Europe in the number of samples submitted for diagnostics. The same applied following the Danish lock-down on 11 March 2020, when a drop was observed in the number of samples submitted to the Department of Tuberculosis and Mycobacteria at the SSI. Simultaneously, TB screening among socially exposed individuals was discontinued in the Copenhagen area, among others. An increasing microscopy-positive percentage may reflect delayed diagnostics because the individual has had to be more self-reliant in terms of seeing a doctor in a situation in which a negative corona test was also required, which may have delayed diagnostics additionally. Thus, it remains unknown if the 22% decline in the number of notifications from 2019 to 2020 (from 284 in 2019 to 221 in 2020) may be explained in full by a real decline, i.e. owed to reduced immigration and a positive effect of restrictions on infection spreading, or if undiagnosed cases are occurring as may be indicated by the high microscopy-positive percentage, maybe in particular among socially exposed persons.

Typing of bacteria from 214 of the 230 (93%) culture-positive patients detected in 2019 shows that a single chain of infection, "C2/1112-15" (also coined cluster 2), still dominates, accounting for 24% of all typed cases in Denmark, and that it follows an increasing trend compared with 18% in 2018 and 2017. The same applied in 2020 when typing of 155 mycobacteria isolates among a total of 180 (86%) showed that cluster 2 comprised 21% of all typed cases in Denmark. The number of "C2/1112-15" followed a steadily increasing trend from subtyping of isolates was initiated in 1992 and until 2012, when the curve broke, which may be linked to the previously mentioned screening efforts made in the Copenhagen

area. As from 2017, the number has started climbing again. Furthermore, it is clear that the share of patients of non-Danish origin in this chain of infection, which was previously all Danish, continues to rise, reaching 60% in 2019, the same level as in 2018 and an increase in comparison with previous years.

## Resistance

For 2019, drug resistance results were available for 228 of the 230 culture-verified cases. In the final two cases, an overgrowth of other microorganisms was observed and therefore antimicrobial susceptibility testing was not possible. A total of 209 of these cases were notified with TB for the first time, including 60 Danes and 149 immigrants. Among those notified for the first time, isoniazid mono-resistance was detected in two (1%) patients, both of whom were immigrants from India and Eritrea, respectively. Poly-resistance was detected in a single patient (resistance to isoniazid and pyrazinamide). No rifampicin mono-resistance was detected. No resistance was detected among the 19 previously notified culture-positive TB patients, including three Danes and 16 immigrants.

Four cases of multi-drug resistance (MDR) were detected, corresponding to 2% of the culture-verified cases. No cases of extreme drug resistance (XDR) were detected in 2019. MDR is resistance to the two primary antibiotics; isoniazid and rifampicin and any other antibiotics. The term XDR resistance designates MDR resistance and additional resistance to a minimum of one of the important second-line drugs belonging to the group of fluoroquinolones and a minimum of one of the three injectable drugs amikacin, capreomycin or kanamycin. The definition of XDR was changed in January of 2021. Now, in addition to resistance to MDR, XDR also encompasses resistance to a minimum of one of the important second-line drugs belonging to the group of fluoroquinolones and

to a minimum of one of the so-called group A antibiotics (levofloxacin, moxifloxacin, bedaquiline and linezolid).

One of the four MDR TB cases in 2019 was a Dane with pulmonary TB who belonged to the same MDR infectious chain observed in 2018 ([EPI-NEWS 37/19](#)). The three others were non-Danish cases from Somalia, Vietnam and the Ukraine, respectively. Two of the cases were Beijing strains, a strain associated with several MDR outbreaks globally.

For 2020, drug resistance results were available for 179 of the 180 culture-verified cases. In the final case, an overgrowth of other microorganisms was observed, and therefore antimicrobial susceptibility testing was not possible. A total of 168 of the cases for whom resistance could be determined were notified with TB for the first time, including 43 Danes and 125 immigrants. Among those notified for the first time, isoniazid mono-resistance was detected in nine (5%) patients. No rifampicin mono-resistance was detected.

In 2020, two cases of multiple resistance (MDR), corresponding to 1% of the culture-verified cases, were observed. One of these cases was a patient with a previous TB diagnosis from 2018 who was comprised by the first MDR-TB outbreak in Denmark, described in [EPI-NEWS 37/19](#). No cases of extreme drug resistance (XDR) were detected in 2020.

(so: <https://en.ssi.dk/surveillance-and-preparedness/surveillance-in-denmark/annual-reports-on-disease-incidence/tuberculosis-2019---2020>)

**Continued from page no.1**

**கூகுள் குரோம் அப்டேட் பண்ணுங்க...  
ஆபத்து இருப்பதாக அரசு தகவல்!**

...கணினியை இலக்காக வைத்து சைபர் அட்டாக் நடத்துவதற்கு சாதகமான பல காரணிகள் கூகுள் குரோம் உலாவியில் கண்டறியப்பட்டுள்ளது.

**சேமிப்பு, திரைப் பதிவு, உள்நுழைவு, பிடிஎப், ஆட்டோ பில், கோப்பு மேலாளர் ஆகிய வசதிகளை நாம் பயன்படுத்தும் போது, அதனை ஹேக்கர்கள் அணுக அனுமதிக்கும் சில பக்ஸ் இருப்பதாக தகவல் வெளியாகியுள்ளது.**

**எச்சரிக்கை விடுக்கும் இந்திய அரசு கூகுள் குரோம் உலாவியின் யூசர் இண்டர்பேஸ் குறித்து பல கருத்துகள் வெளிவந்த வண்ணம் உள்ளன. இதில், பயனர்களின் தரவுகளை அணுகும் விதம், மோசமான விளைவுகளை ஏற்படுத்தும் என அவர்கள் எச்சரிக்கை விடுத்திருந்தனர். இந்திய அரசும் பல முறை, எச்சரிக்கை விடுத்து, கூகுள் குரோம் பிரவுசர்களை புதுபிக்க அறிவுறுத்திவருகிறது.**

**கணினி, இணையத்தள வரவிற்கு முந்தைய நாட்களில், நாம் உண்மையான நபர்களுடன் தொடர்பில் இருந்தோம். நம் தனிப்பட்ட தகவல்கள் நம் கைகளின் பொறுப்பில் இருந்தன. அங்கு இந்தளவு பிழைகள் நிகழ்ந்ததில்லை. இப்போது நாம் சிறிய எலக்ட்ரான்கள், இலக்கங்களின் தயவில் சூழன்று வருகிறோம். இதில் ஆபத்தான பல இணைய தாக்குதல்களும் அரங்கேறுகின்றன.**



## ஹேக்கர்கள் அட்டகாசம்

பயனர்களை கவர தேவையான பக்கத்தை நிறுவி, அதற்குள் அவர்களை இழுத்து, அதன்மூலம் சில ஹேக்கிங் தரவுகளை நிறுவி, பயனர் தனியுரிமை தகவல்கள் திருடப்படுகின்றன. எனவே, எந்த சூழலிலும் தேவையற்ற தளம் என்று தெரிந்தால், உடனடியாக அதிலிருந்து வெளியே வந்து விடுங்கள். இணைய பயனர்கள் வங்கி பரிவர்த்தனைகள், இணைய படிவங்களை நிரப்பும் போது கவனமாக இருக்க வேண்டும். எப்போதும், பிரைவேட் பிரவுசர் அல்லது இன்காக்னிட்டோ பிரவுசரில்இது போன்ற செயல்பாடுகளை மேற்கொள்ள வேண்டும். சலுகைகள் தருகிறோம் என்று மொபைல் எண்ணுக்கு வரும் குறுஞ்செய்திகளை அப்படியே தவிர்த்துவிடுங்கள். எந்த காரணத்தைக் கொண்டும் தெரியாத எண்களில் இருந்து வரும் லிங்குகளை கிளிக் செய்ய வேண்டாம்.

## கூகுள் குரோம் புதிய அப்டேட்

எனவே Google Chrome பயனர்கள் அதன் சமீபத்திய பதிப்பைப் பதிவிறக்கி நிறுவுவது நல்லது. "விண்டோஸ் இயங்குதளத்திற்காக Chrome 98.0.4758.80/81/82 பதிப்பு, Mac, linux ஆகிய இயங்குதளங்களுக்காக 98.0.4758.80 பதிப்பு புதிதாக வெளியிடப்பட்டுள்ளது. இதில் பல திருத்தங்களும், மேம்பாடுகளும் மேற்கொள்ளப்பட்டுள்ளது என்று கூகுள் தெரிவித்துள்ளது. இது அப்டேட் செய்யும் பயனர்களுக்கு கிடைக்கும் என்று நிறுவனம் உறுதிபடுத்தி உள்ளது.

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