

H.E.W.R.A.G.

NEWSLETTER MAY 2023



May's Rotary Monthly Theme brings focus to the need to empower our next generation of leaders and highlights the many projects that Rotarians can and do undertake to realise such empowerment and education.



2023 May

www.hewrag.org hewrag@gmail.com

Greetings!

As HEWRAG , we take seriously our commitment to support Rotarians to do "Good in the World." Health education continues to be one of the most important topics worldwide especially after the recent pandemic when so many children missed out on their general education. Teaching children is a way of taking health awareness into the heart of families.

HEWRAG continues our emphasis on five areas of public health: Medical Missions and Health Fairs; Cervical Cancer Prevention and Elimination; Tuberculosis Awareness and Prevention; Autism Awareness and Empowerment; and Oral Health and Nutrition.

If you are working in these areas or if you have another area of public health that you'd like us to consider adding, we encourage you to contact us.

With the successful launch of our 1st Chapter in District 2452 we would like other Districts to start either District or Country chapters to follow this example. It has been approved by RI and we have all the steps to facilitate this action if a member wishes to start a new chapter in their area. Please email us for details at josie@beachroad.co.za.

RI has also amended the constitutions of Rotary Action Groups to allow for non Rotarians to serve as Board members.

We will be present in the Hall of Friendship at the RI Convention in Melbourne in May, please pop by to say hello we are at stand number 489.

Please attend our AGM together with presentations from several of our members which will be held in meeting room #209 at 4:30 pm on Sunday May 28th. If you would like the opportunity to serve on the Board please let me know asap.

Unlike most other RAGs we do not charge an admission fee and depend on donations from our members to run our webpage and admin costs, I realise that these are hard times but if you could spare a few \$s please go to the donations page of our website and send them to us.

www.hewrag.org/donate

Stay safe and well

Josie Norfolk

Chair

The goal of the Health Education and Wellness Rotary Action Group is to promote good health and wellness through healthy lifestyle choices and disease prevention. The emphasis is on building awareness, promoting education, and providing information to help achieve and maintain good health and to utilize effective prevention in an integrated way. Rotary members are encouraged to promote the action group in their districts and especially in their Club's.

NEWS FROM HEWRAG CHAPTER 2452

WORLD HEARING DAY



District 2452 Medical & Wellness Group (A HEWRAG Chapter) recently held a very successful conference at St Josephs University in Beirut. The much esteemed speakers were present from all parts of the world; the specialised seminar section was followed by a public conference where patients and their families were welcomed. Dr Rami Sarkis and his team did a tremendous job and the whole day was streamed both on Zoom and Facebook.







MARCH 3RD 2023

WITH

Rotary District 2452
Medical and Wellness
Group

**WORLD
HEARING DAY** 

**SAVE THE DATE
& STAY TUNED!**



This conference was given wide publicity on both television and radio and gave a huge boost to both Rotary and HEWRAG in District 2452 which covers 9 counties in the Middle East. It has also led to several other projects in the District.



District 2452



District 2452
Medical and
Wellness Group
A Hearing Chapter



Hearing loss

A Hidden Disability

Some kids are born with it & others get it later on!
Some hearing losses are temporary & some are permanent!

March 3 is World
Hearing Day

Check Your Hearing!



Hearing Screening Campaign 02 March 2023



2452 MWG Jordan 1st Country Project

SOS Children's VILLAGE

A hearing screening campaign was held in Jordan to celebrate "World Hearing Day" Where babies and Children's hearing was tested by members of 2452 MWG at the SOS Children's Village and the children were given meals and gift packs on the day.

Rotary

District 2452 Medical and Wellness Group A Hearing Chapter

District 2452

Hearing Screening Campaign

02 March 2023
In SOS Children's Village

2452 MWG Jordan
1st
Country Project

**Hearing Loss...
a Hidden Disability**

March 3 is World
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Our Sponsors

Cochlear

SOS Children's Village

Novo Nordisk



An email from one of our members – can anyone help with this amazing project, if so contact me for more details

Dear Josie,

Thank you for your email and hope that being part of HEWRAG allows me to share our club project.

Below is the project introduction and I'm attaching a flyer and project proposal for reference.

Jordan is facing high rates of blindness and visual impairment is double the global estimates and it is subject to high increase.

Our Rotary Club of Amman Ammon has been actively focusing on the underprivileged group of blind Jordanians since 2012 and lately partnered with Jordan Eyes Bank.

Jordan Eyes Bank performs cornea transplantation to every patient in NEED, but the problem is the long waiting list due to lack of developed surgical devices that allows more patients to see and conduct an independent, active and productive life.

Our project is a national priority and advocates a shared social responsibility that will reflect the Rotary Spirit.

I truly appreciate if you can suggest international partners to the project as we will apply for a global grant and partners clubs will appear as Co-sponsors.

We need your help to make our efforts go further!

Thank You and Best Regards,

Lubna Fakhoury

Honorary Secretary 2022/2023
RCA Ammon, Amman-Jordan
D2452



Fighting Blindness in Jordan

- This is a Humanitarian/Disease Prevention and Treatment project.
- It supplies Jordan Eyes Bank with Medical Devices to perform Lamellar Keratoplasty (LKP) to patients suffering from Keratoconus in Jordan.
- The medical devices allow Ophthalmologists in the Eyes Bank to split a single donated cornea to two parts serving double the number of patients and reducing the rejection rate of implanted cornea from 20% to (1-5 %).

Currently the long waiting list at Jordan Eyes Bank exceeds **1000 patients!**

2000 Jordanians will benefit yearly after the project completion.

For more info contact project committee:

 +962 79 561 4161

 lubnafa@gmail.com

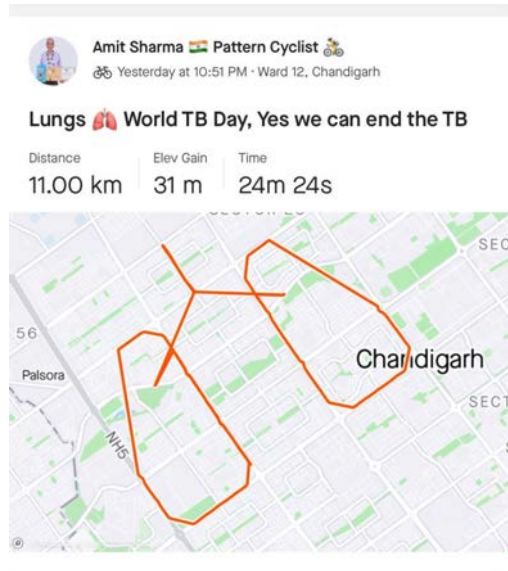
 @rcaammon

 @rotaryammon

 www.rcaammon.org

Rotary Chandigarh Midtown observed world TB day in partnership with State TB cell Haryana on 24th March 23.

At 530 am in the morning Dil se cycling club led by Amit Sharma traced a figure of a pair of lungs on a 31 km cycle track and reached Town park Panchkula .



NATAK mandli performed nukkad play to educate the walkers about TB Symptoms ,treatment facilities by govt and help line numbers .



Selfie stand attracted the daily walkers to click a pic for status today.
Social media promotions were encouraged to support advocacy by Rotary to end TB.



Pres Dr Sanjay Kalra, Brig Sabharwal, Ann Jyotie, PP RK Luther, DYS Pradeep Sisodia and the entire State TB cell and district TB Team led by Dr Sumeet Mor and Dr Parminder with 20 cyclists raised slogan to end TB .



At Ashiana complex screening camp for testing TB in 2hrs and other tests was organised and attended by over 500 residents including children.







15 Asha workers and 12 TB officers were felicitated by Rotary for their outstanding performance and 30 patients of active TB were given nutrition supplements.

3 champions shared their success stories.

Overall the event saw humungous participation and impacted thousands of people and motivated to join the drive to make Haryana TB free



Rotary ChandigarhMidtown 's signature project

Rotary Jaquar TB Hut was inaugurated on 28/03/0/23 by Sh

kunwar Shamsheer Singh , Head CSR Jaquar in the presence of Dr Mukta Kumar , CMO Panchkula and Dr Umesh Modi PMO CH 6 Panchkula.

The project was completed by the CSR Grant of Rs 30 lacs provided by Jaquar on the

1200sq.ft. piece of land allotted by the civil hospital .

The Rotary Jaquar TB Hut will provide services like sample collection, Dot centre for providing free medicines to the TB patients, distribution of high protein diet to the adopted YB patients under Nikshey Mitra , online uploading etc ,all under one roof for the convenience of patients coming to the hospital from Panchkula district.

Pres Dr Sanjay Kalra welcomed the guests and gave a brief review of Project objectives and flow of services in the TB hut, the first of its kind in Haryana and the country.

While Kanwar Shamsheer Singh appreciated the efforts of Rotary in partnering with Jaquar for the cause of TB elimination, he expressed gratitude to the Health department for giving opportunity to Jaquar to serve the community.

Project Chair Salil Chopra elaborated the efforts of Rotary in response to the call to Action by the Hble. PM of India, to end TB by 2025.

A talk on millets for the audience was given by Aparna as part of poshan pakhwara to generate awareness about Millets which are rich source of proteins, mineral and fibre. The 25 TB patients adopted under Nikshay Mitra were also given millets in their food baskets besides nutri and protinex..

CMO Dr Mukta Kumar said that community connect is essential for success of Public health problem and TB, like Polio needs to be eliminated.

She proposed expansion of the project to make it more inclusive.

Over 50 people including a galaxy of Rotarians, Jaquar officers and officials from health department Panchkula participated in the event.

- As a result of the above Haryana through Rotary Grant have acquired mobile units which they are using for extending reach to the rural communities located in far flung areas and helping with active case finding.
- Setting up TB Huts for comprehensive services under one roof for convenience of patients and their follow up .

The Tuberculosis Hut for TB elimination under in roof at Civil Hospital Panchkula

TB is not a just disease but socio economic problem so this requires every section of the society to play its part in ending the disease.

OBJECTIVE :

- To provide comprehensive services under one roof for better goal achievement
- To avoid cross mingling of TB Patients inside the hospital
- To avoid disruption of services during pandemic.
- To improve patient compliance regarding nikshay portal facilities

The proposal for TB hut is as under-The land for construction of TB Hut,with free water and electricity has been provided by Civil Surgeon Panchkula. TB hut has been built in 1200 sq ft. area using pre-fabricated structure with partitions. It includes following services:

- Sample collection counter
- Consultation room
- DOT counter
- Counseling & Nikshay Mitra (NSP) counter
- Admin office for Nikshay portal services- Bank transfer, report uploading, incentives, store etc.

ESTIMATED BUDGET: Rs 24 Lakhs + GST for ground floor and provision of expanding one additional floor.

The MOU has been signed for maintenance and upkeep and operationalization of services in the TB Hut. Besides Furniture and fixture, the staff of the department will continue to work in the new facility, while IPD and support services shall continue inside the hospital premises.



जनरल अस्पताल में बन रही टीबी हट, एक ही छत के नीचे मिलेगा इलाज

जनरल अस्पताल में आने वाले दूसरे मरीजों के साथ कॉन्टैक्ट होगा खत्म, डायग्नोसिक एक जगह

संदीप चौधरी पंचकुला

एक तरफ सरकार साल 2025 तक भारत को टीबी मुक्त करने की गारंटी में है। दूसरी ओर पंचकुला में टीबी के मरीजों के इलाज को लेकर पहल की जा रही है। इसमें ट्यूबरकुलोसिस यानी कि टीबी के मरीजों को जनरल अस्पताल के अंदर नहीं, बल्कि अस्पताल की बिल्डिंग के बाहर इलाज देने के लिए काम शुरू हो गया है। क्योंकि, अब जनरल अस्पताल में टीबी के मरीजों के इलाज और डायग्नोसिक के लिए अब टीबी हट का सेटअप किया गया है।

निजीकरण से बाहर डायग्नोसिक करवाना पड़ेगा। इसे जो डाक्टर मिलती है, उसके लिए भी अलग-अलग कमरे में चक्कर नहीं



लगाने होंगे। इस टीबी हट में मरीजों के लिए ओपीडी से लेकर इनके सलून, टूलेट, सीनिंग जैसी सभी सुविधाएँ होंगी। वहीं पर अब इन मरीजों के लिए पदार्थ देने के लिए सेंटर बनाया जाएगा। इसके अलावा अस्पताल में अलग-अलग जगह पर सेंट टीबी डिपार्टमेंट का स्टेशन भी इसी बिल्डिंग में सिस्टम होगा। अस्पताल की बिल्डिंग से बाहर टीबी हट बनाने का फैसला इसलिए भी किया गया है क्योंकि, इन मरीजों

का इम्प्लू सिस्टम काफी कमजोर होता है। इनकी दवाइयों का बोझ भी लंबा चलता है, ऐसे में इन मरीजों को दूसरे मरीजों की भाँति से इलाज करने में दिक्कत होती है। जनरल अस्पताल में चलने वाली चोट एंड टीबी ओपीडी में ही एक साथ सभी मरीज आते हैं। दूसरी ओपीडी के भी काफी ज्यादा मरीज एक दूसरे के कॉन्टैक्ट में आते रहते हैं। इससे बीमारी फैलने का खतरा भी काफी ज्यादा हो जाता है।

24 लाख हो रहा सार्ज, रोटी चले के साथ मिलकर हो रहा काम
टीबी हट अस्पताल के केसरवाड़ ग्रीन बेल्ट एरिया में बनाया जा रहा है। इसी एरिया के एक प्लॉट पर मरीजों के कामकाज बना रही है। इस पर 24 लाख रुपए खर्च हो रहे हैं। मई में इस बिल्डिंग का काम पूरा किया जायेगा और फिर अगले महीने इस टीबी हट का इन्वीजनल करने को तैयारी कर रहा है। अभी का 1200 स्क्वियर फीट का प्लॉट फल फलाना जा रहा है। अगले फरवरी फाल्गुन तक भी है, लेकिन अभी फंड की कमी है। इसके साथ ही 120 स्क्वियर फीट और जमीन पर पड़े हुए फल फलाना जा रहा है, जिस पर भी पहले मंजूर बनाई जानी, लेकिन अभी की स्थिति यही है।
-डॉ. परमेश, टीबी सेल डायरेक्टर, लुधियाना

Committee:

The Rotary committee for monitoring and supervision of project-

Counsellor: RK Luther

Chairman: Dr Sanjay Kalra

Co-Chairman: Salil Chopra

Members: BL Ramsisaria
Pradeep Sisodia
JS Bawa
Nitin Kapur

Rotary
Chandigarh Midtown



Rotary Jaquar TB Hut Civil Hospital, Panchkula



**TB HAREGA
DESH JEETEGA**

Tuberculosis (TB) was declared an emergency by the World Health Organization nearly 25 years ago. Since then, various efforts have been made to prevent TB in different countries. Even though anyone can be affected by TB, the worst hit are the marginalized population who battle poverty, malnutrition, poor hygiene, stigma, loss of wages, poor housing and working conditions.

TB continues to be India's severest health crisis. India has the highest burden of incident tuberculosis (TB) cases and deaths globally with an estimated 26 lakh people contracting the disease and 4.36 lakh people dying from the disease every year (WHO Global TB Report 2020). India also has more than a million 'missing' cases every year that are not notified and most remain either undiagnosed or unaccountably and inadequately diagnosed and treated in the private sector. This tragic loss of life, continued suffering, poverty need to end with concerted efforts from all of us.

The Revised National TB Control Program has been upgraded to National TB Elimination Program by The Ministry of Health & Family Welfare under a National Strategic Plan (2017-25) for elimination of TB in the Country by 2025 to give adequate advocacy for achieving the goal. The Goal to end TB has got a



much needed boost with introduction of TruNAT with highest accuracy for diagnosing many forms of TB.

The program has a vision of achieving a "TB free India", with strategies under the broad themes of "Prevent, Detect, Treat and Build" pillars for universal coverage and social protection". The program provides various free of cost, quality tuberculosis diagnosis and treatment services across the country through the government health system.

Due to the COVID-19 related lockdown, the potential increase in incidence and mortality due to TB has wiped out the gains made in the last few years. TB is not only a medical disease but a social problem. Such multi-faceted issues are beyond the efforts of health sector alone and call for comprehensive solutions by meaningful involvement of not just non-health sectors within the Government but also those outside the Government. Convergent actions by various stakeholders are therefore imperative for realization of country's goal of Ending TB by 2025.

Rotary National TB Control and Awareness Committee, International TB Union and Central TB Division GOI signed a tripartite agreement for eliminating TB by 2025. Following activities are being undertaken by Local Chapters of Rotary

1. Nikshay Mitra: Adoption and provision of nutritional support to the MDR TB/HIV-TB patients from the under privileged community.
2. Organize awareness rallies on 24th March which is observed as the "World TB Day" and Nikshay Diwas on 24th of every month.

3. Create awareness amongst the private medical fraternity, the need to report every TB case to the government health authorities.
4. Help in removing the stigma attached to the disease
5. Create awareness among school children about the signs and symptoms about the disease.
6. In consultation with the local health authorities conduct health and detection camps in industrial units employing large number of workers, in prisons etc.
7. Educate and guide the TB patients about the treatment facility and medication at government hospitals which is provided free of any cost.
8. Adopting Children with MDR /TB and catering to needs for continuing education through scholarships.
9. Distribute leaflets in the community which illustrate signs and symptoms about the onset of TB and the proper coughing/spitting etiquette.
10. Encourage volunteers to sign up and pledge their support to the Ministry of Health & Family Welfare to make their village, district, state, and country TB FREE



More than a Project

Rotary club of Locri District 2102

"ROTARY AT SCHOOL: Fighting Childhood Obesity"

Conceived by the martial arts master Vincenzo Ursino, "ROTARY AT SCHOOL: Fighting Childhood Obesity" is promoted by the Rotary club of Locri chaired by Domenico Catalano and sponsored by District 2102 with Governor Gianni Policastri

As a real mission: to raise awareness among young people about the importance of proper nutrition and a more active lifestyle to fight childhood obesity and prevent the risk of future metabolic diseases.

Now in its sixth year the project has seen the involvement of 6 comprehensive schools, over 2,000 parents, over a thousand pupils and over 200 teachers in the Locride area.

Situated in the land of olive and citrus groves, in which, unfortunately, the tradition of the Mediterranean diet handed down from previous generations, too often is giving way to a drift towards junk and pre-packaged food models, where the tendency particularly for very young girls to be a sedentary generation that has long since replaced street games with hours spent at home watching TV and video games.



From a survey conducted it was shown that:

One million one hundred thousand Italian children between the ages of 6 and 11 are overweight or obese.

The percentages of overweight or obese Calabrian children was even higher than the national averages: 26% of overweight children (23.6% in all of Italy) and 16% obese (the national figure is 12.3%).

Bad eating habits were also highlighted by the same survey. In fact, 11% of children skip breakfast; 28% eat inadequately; but 82% eat a too abundant mid-morning snack. Furthermore, 23% of parents stated that their children do not consume fruit and vegetables on a daily basis.

And if just 10% of children carry out physical activity appropriate to their age, the risk of ending up in a situation of obesity deriving from a sedentary lifestyle and an incorrect diet is underestimated by 40% of families.

"ROTARY AT SCHOOL: Fighting Childhood Obesity" was conceived with the aim of raising awareness of correct eating habits and spreading the culture of movement in schools, where the co-presence of pupils, parents and teachers is concentrated

There are five fundamental phases of "ROTARY AT SCHOOL: Fighting Childhood Obesity".

- The first is that of data collection
- The second consists of building an updatable online database platform.
- The third is the information phase, with the delivery of information brochures etc to the school children and families in the area,
- The fourth is that of classroom training, In this phase, there were four training days given to families and teachers from all the primary schools in the area
 1. The first was focused on correct eating habits.
 2. The second day of training concerned motor activity, involving all the teachers and pupils of the primary schools
 3. The third day of training focused on methodology and didactics of motor activity
 4. The fourth day of training concerned correct eating habits

This training was then put into place at all the local primary schools with planned and structured lessons and more concentration on differing sporting activities including karate.

- The fifth and final phase of "ROTARY AT SCHOOL: Fighting Childhood Obesity" focuses on in-depth analysis, with a study of the phenomenon of obesity which sees the involvement of all pupils and teachers who were involved in the project presented (during an annual event held in the great hall of the Istituto Superiore "Marconi" in Siderno) with prizes and certificates awarded to all the participants.

Particularly important, in the final event, was the story of the journey experienced by all those involved who did not limit themselves to explaining the excellent results achieved, but also expressed their enthusiasm for having been part of a project which demonstrates how working together for a single goal can achieve such excellent results. Perhaps having fun and explaining to one's friends and relatives the importance of correct diet and lifestyles to become healthier and more dynamic

adults is important to children, because the lesson drawn from this experience is that the very young are very receptive to learning and enthusiastic in participating in these projects and that the school knows how to become a great incubator of sound principles also from the point of view of nutrition and movement.

The project, as well as in the purely scholastic context, had a vast echo in the reference area and the awareness of the Rota Club of Locri, thanks to the media attention it managed to arouse with articles both online and in the press, as well as on radio and television circuits and on social networks.

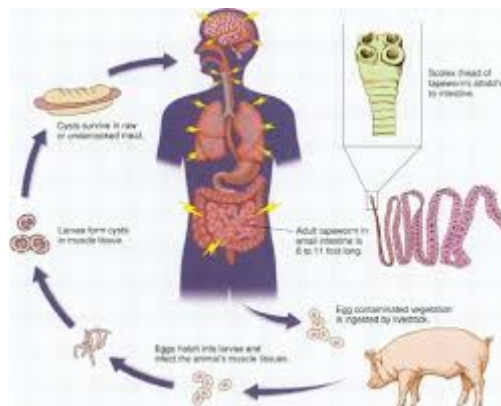


Tapeworms in Humans



Tapeworms are flat, segmented worms that live in the intestines of some animals. Animals can become infected with these parasites when grazing in pastures or drinking contaminated water.

Eating undercooked meat from infected animals is the main cause of tapeworm infection in people. Although tapeworms in humans usually cause few symptoms and are easily treated, they can sometimes cause serious, life-threatening problems. That's why it's important to recognize the symptoms and know how to protect yourself and your family.



Tapeworm Causes

Six types of tapeworms are known to infect people. They are usually identified by the animals they come from -- for example, *Taenia saginata* from beef, *Taenia solium* from pork, and *Diphyllobothrium latum* from fish.

Tapeworms have a three-stage lifecycle: egg, an immature stage called a larva, and an adult stage at which the worm can produce more eggs. Because larvae can get into the muscles of their hosts, infection can occur when you eat raw or undercooked meat from an infected animal.

It is also possible to contract pork tapeworms from foods prepared by an infected person. Because tapeworm eggs are passed with bowel movements, a person who doesn't wash hands well after wiping and then prepares food can contaminate the food.

Tapeworm Symptoms

Sometimes tapeworms cause symptoms such as:

- Nausea
- Weakness
- Diarrhoea
- Abdominal pain
- Hunger or loss of appetite
- Fatigue
- Weight loss
- Vitamin and mineral deficiencies

However, often tapeworms don't cause symptoms. The only sign of tapeworm infection may be segments of the worms, possibly moving, in a bowel movement.

In rare cases, tapeworms can lead to serious complications, including blocking the intestine, or smaller ducts in the intestine (like the bile duct or pancreatic duct).

If pork tapeworm larvae move out of the intestine, they can migrate to other parts of the body and cause damage to the liver, eyes, heart, and brain. These infections can be life-threatening. Seizures are the most common symptom of cysticercosis, the infection caused by the larvae of the pork tapeworm.

Treatment for Tapeworms

If you suspect you have tapeworms, see your doctor. Diagnosing a tapeworm infection may require a stool sample to identify the type of worm.

If worms are not detected in the stool, your doctor may order a blood test to check for antibodies produced to fight tapeworm infection. For serious cases, your doctor may use imaging tests such as computed tomography (CT) or magneticresonance imaging (MRI) to check for tapeworm lesions or secondary swelling outside of the digestive tract.

The type and length of treatment may depend on the type of tapeworm you have. Tapeworms are usually treated with a medicine taken by mouth. The most commonly used medicine for tapeworms is praziquantel (Biltricide).

These medications paralyze the tapeworms, which let go of the intestine, dissolve, and pass from your body with bowel movements. If worms are large, you may have cramping when they pass. Your doctor will recheck stool samples at one and three months after you finish treatment. When tapeworms are confined to the intestines, appropriate treatment gets rid of them in more than 95% of people.

More serious complications of tapeworm infection are also treated with medications.

Preventing Tapeworms in Humans

Tapeworms are uncommon in the U.S. today because of laws on feeding practices and inspection of the animals we use for food.

You can further reduce your risk of tapeworms by washing your hands before and after using the toilet and by following these food safety tips.

- Avoid raw fish and meat.

- Thoroughly cook meat to temperatures of at least 145 degrees Fahrenheit for whole cuts of meat and to at least 160 degrees F for ground meat and poultry. Then, allow the meat to rest for three minutes before carving or consuming; the heat continues killing pathogens during that time.
- Freezing meat to -4 degrees F for at least 24 hours also kills tapeworm eggs.
- When travelling in undeveloped countries, cook fruits and vegetables with boiled or chemically-treated water before eating.
- Wash hands with soap and hot water before preparing or eating foods.



When Your Golden Years Feel Blue:

Recognizing and Battling Depression in the Elderly

There may be no life transition as jarring as retirement. While we often think of leaving the workforce behind as a lifetime achievement and something to plan toward, retirement can come with many sudden and dramatic alterations to how we live our lives. This reality can create the potential for mental health issues to develop.

Americans nearing retirement are especially at risk of developing mental health issues. Older people often deal with new or reoccurring health problems, the loss of friends or loved ones and a sense of life slowing down. It's a lot for anyone to handle.

"You have the convergence of these issues where it may not be one thing that sets you back but the culmination of things that really has an impact on health and wellbeing," AARP Foundation Programs Senior Vice President Emily Allen told RetireGuide.



"You have the convergence of these issues where it may not be one thing that sets you back but the culmination of things that really has an impact on health and wellbeing."

— Emily Allen, Senior Vice President, AARP Foundation Programs

According to Dr. David Steffens, chair of UConn Psychiatry and an expert in late-life depression and dementia, common mental health issues older people and recent retirees face are anxiety and depression. These issues can range from mild to debilitating and can have a major impact on how retirees live.

Common Causes of Depression in the Elderly

[According to the National Institute on Aging](#), depression in older adults can be brought on by a major life event or change — like retirement — or

significant amounts of stress. Depression can also manifest for no clear reason at all.

Several common factors occur around retirement age that can potentially cause depression and anxiety in seniors, according to Steffens.

Factors That Can Trigger Depression and Anxiety in Seniors

- Prior history with depression and anxiety
- Leaving a career
- Losing loved ones
- Declining physical health

Prior History

The National Institute on Aging has found that older people who had depression when they were younger can be more likely to develop those issues again later in life.

"One risk for depression and anxiety in older adults is prior history of that," Steffens told RetireGuide. "Any kind of major life change or stress can bring that about."

Though older people who are facing mental health issues again may have strategies or a support system in place, Steffens recommends that those at risk of depression and anxiety always seek help from a therapist or primary care physician.

Leaving Your Career Behind

According to the [U.S. Census Bureau](#), one in every five Americans will be at retirement age by 2030, which would create a demographic shift where older people will outnumber children for the first time in American history.

Most retirees expect to stop working full-time to enjoy a slower pace of life, pursue new activities and reconnect with their families and communities.

But Daniel Jimenez, an associate professor of psychiatry and behavioral sciences at the University of Miami, has found that it's not nearly that simple.

"Retirement plays a huge role in mental illness because when somebody asks you 'tell me about yourself,' what's the first thing you say? You mention what you do. And when you retire, you're no longer that. So, there's a certain loss of identity," Jimenez said.



“Retirement plays a huge role in mental illness because when somebody asks you ‘tell me about yourself,’ what’s the first thing you say? You mention what you do. And when you retire, you’re no longer that. So, there’s a certain loss of identity.”

— Daniel Jimenez, Associate Professor of Psychiatry and Behavioural Sciences, University of Miami

Jimenez, an expert in cognitive behavioural therapy in older adults, told RetireGuide that jobs and careers for working professionals serve as more than a way to earn money — they provide structure to everyday life and a sense of purpose.

“When we’re left without that, we’re sort of drifting through life,” said Jimenez, who holds a doctorate in clinical psychology. “There’s a certain ‘what am I going to do now? I’m useless.’ There’s a lot of existential stuff that comes up.”

What You Lose When You Leave Your Job

- Daily structure
- A part of your identity and purpose
- Long-term goals and commitments
- Social interaction

Losing Loved Ones

Another unfortunate reality of growing older is losing friends, family or a spouse as they age as well.

These challenging circumstances are difficult to navigate at any point in life but may be exacerbated to a greater extent with older people due to the changes that come with retirement.

“Not only having to deal with that, the loss of someone very close to you, but then also having to then reconcile with your own mortality because your time

is coming soon,” Jimenez said. “We don’t know when but when you’re older, you’ve lived a lot more life than you have left.”

Declining Physical Health

Depression, while treatable, is not a normal part of aging; however, older adults are more at risk for increasing health problems, which can make them more vulnerable to mental health issues.

According to a 2021 report by the National Institute of Mental Health (NIMH), a chronic illness like diabetes or cancer can make you more likely to have mental health issues.

Similar to the NIMH report, the CDC found that the number of older adults who experience depression jumps from one to five percent in a typical population to 13.5 percent in seniors who require home health care.

Chronic Illnesses with which Depression Is Common

- Alzheimer’s disease
- Autoimmune disorders
- Cancer
- Diabetes
- Heart disease
- Multiple sclerosis
- Parkinson’s disease
- Stroke

Along with chronic health issues, physical changes like declining eyesight and hearing can also have a negative impact on the mental health of older Americans.

“Every road leads either to or from mental illness,” Jimenez said. “Let’s say you’re having vision loss or you’re having hearing loss, which is common in older adulthood. That’s going to affect your mental health. You’re no longer able to see and our world is so dependent on vision and it’s a really big deal.”

Signs and Symptoms of Depression in the Elderly

According to the National Institute on Aging, many retirees are happy with their lives in spite of the many added challenges that come with age.

“Overall, older adults as a whole have a fair amount of resilience,” Steffens said. “They basically bring whatever toolkit that they have developed through life in terms of life stressors when they were younger, stressors within the family, stressors within work and all of that and are able to actually navigate that post-retirement period.”

But while most seniors are happy, many do struggle. Steffens said that it’s natural for older adults to have days when they don’t feel their best. But it’s important to note if bad days become a trend or if seniors experience a loss of interest in activities that they like doing. Other signs can include food not tasting as good as it used to, loss of concentration or trouble sleeping.

Eventually, this can culminate in seniors beginning to pull back and withdraw from others and parts of their life.

Depression may also manifest itself differently in older adults compared to younger generations, Steffens said.

Depression in Older Adults vs. Younger People

Warning Signs in Older Adults	Warning Signs in Younger People
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Loss of interest in activities	Constant sadness
Trouble focusing or concentrating	A feeling of loss without having lost anyone
Withdrawing from life	Extremely low self-esteem
Trouble sleeping	Trouble sleeping
Loss of appetite	Loss of appetite

Many older adults also experience anxiety, which is different from depression. According to the National Institute of Mental Health, anxiety involves anxious thoughts that don’t go away and worsen to the point that they interfere with your daily life.

Retirees are susceptible to anxiety due to the many added stressors that come with older age, from money issues to health.

“For anxiety, a lot of worrying,” Steffens said. “Thinking too much about things that you might have done, things that you might have said, things that you wish you would’ve done or said. The kind of thoughts you can’t get out of your mind.”

Common Signs of Anxiety

- Feeling irritable
- Feeling restless

- Struggling to control worries
- Struggling to concentrate
- Difficulty sleeping

Steffens also advises family members or caregivers who suspect their loved one is struggling with mental health issues to be observant of sudden changes in behaviour. Negative reactions could be a sign that something else is going on.

The Role of Dementia

Dementia, a condition characterized by the impairment of brain functions, is more prevalent in older adults and can also lead to depression and anxiety.

The most common type of dementia is Alzheimer's disease, according to the CDC.

"Usually, memory gets hit first. Everybody has the experience of going into a room and saying 'why was I here, where did I put my keys,' that kind of thing," Steffens said. "But if it looks like somebody's coming in and asking the same set of questions that they asked 10 or 15 minutes ago or an hour ago, and it really looks like the answer didn't stick with them, that can be a sign of early memory problems."

Unfortunately, dementia can be worsened by mental health issues — and vice versa. Older adults can experience intense stress from the symptoms of dementia as they come to terms with its effects.

Steffens also added that it is sometimes tough at first to determine if someone is dealing with depression or dementia. In these instances, doctors can provide depression treatment and then analyze how much the patient has improved.

Dementia can also lead to mental health issues in the patient's spouse or caregiver. If your loved one has Alzheimer's or a similar disease or condition, it's important for you to remember to practice self-care and ask for help, if necessary.

"It's an enormous, enormous stressor that affects the caregiver," Jimenez said.

Lyme Disease: Important Facts to Know

Written by Shoshana Siegel

Medically Reviewed by Poonam Sachdev on March 30, 2023

What Is Lyme Disease?

Lyme disease is a bacterial infection. You can get it when a blacklegged tick, also called a deer tick, bites you and stays attached for 36-48 hours. If you remove the tick within 48 hours, you probably won't get infected.

If you do get infected, the bacteria travel can through your bloodstream and affect various tissues in your body. If you don't treat Lyme disease early on, it can turn into an inflammatory condition that affects multiple systems, starting with your skin, joints, and nervous system and moving to organs later on.

The chances you might get Lyme disease from a tick bite depend on the kind of tick, where you were when it bit you, and how long the tick was attached to you. You're most likely to get Lyme disease if you live in the North eastern United States. The upper Midwest is also a hot spot. But the disease now affects people in all 50 states and the District of Columbia.

What Are the Symptoms of Lyme Disease?

Know what to look for

Symptoms can start anywhere from 3 to 30 days after the bite. They may look different depending on the stage of your infection. In some cases, you won't notice any symptoms until months after the bite.

Early symptoms include:

- Fever
- Chills
- Headache
- Fatigue
- Muscle and joint pain
- Swollen lymph nodes

All of those symptoms are also common in the flu. In most Lyme infections, one of the first symptoms you'll notice is a rash.

Without treatment, symptoms can get worse. They might include:

- Severe headache or neck stiffness
- Rashes on other areas of your body
- Arthritis with joint pain and swelling, particularly in your knees
- Drooping on one or both sides of your face
- An irregular heartbeat
- Inflammation in your brain and spinal cord
- Shooting pains, numbness, or tingling in your hands or feet

What does the rash look like?

Some Lyme rashes look like a bull's-eye with circles around the middle. But most are round, red, and at least 2 inches across.

It may not look as red on darker skin tones and may not stand out as much as it does on lighter skin. This can make it hard to spot. Black people may be more likely than white people to have the disease spread throughout the body more when diagnosed. Research shows that the difference in how the rash appears has caused some people to receive a later diagnosis. If you don't treat Lyme disease, it can get worse and cause complications, so an early diagnosis is critical.

The rash slowly gets bigger over several days. It can grow to about 12 inches across. It may feel warm to the touch, but it's usually not itchy or painful. It can show up on any part of your body.

If you know what the rash looks like on the colour of your skin, you may be able to catch it early.



How small are ticks?

Ticks come in three sizes depending on their life stage. They can be the size of a grain of sand, a poppy seed, or an apple seed.



How Is Lyme Disease Diagnosed?

Your doctor will diagnose you based on your symptoms and whether you've been exposed to a tick. You may also get a blood test. In the first few weeks of infection,

the test may be negative because antibodies take a few weeks to show up. It may take 4-6 weeks to see a positive result.

Hopefully soon, there will be tests that can diagnose Lyme disease in the first few weeks after you're exposed. The earlier you get treated, the less likely it'll get worse.

What Are the Stages of Lyme Infection?

There are three stages:

- **Early localized Lyme:** Flu-like symptoms such as fever, chills, headache, swollen lymph nodes, sore throat, and a rash that looks like a bull's-eye or is round and red and at least 2 inches long. This stage typically starts 3-30 days after a tick bite.
- **Early disseminated Lyme:** Flu-like symptoms like pain, weakness, or numbness in your arms and legs, changes in your vision, heart palpitations and chest pain, a rash (that may or may not be a bull's-eye rash), and a type of facial paralysis known as Bell's palsy
- **Late disseminated Lyme:** This can happen weeks, months, or years after the tick bite. Symptoms may include arthritis, severe fatigue and headaches, dizziness, trouble sleeping, and confusion.

About 10% of people treated for Lyme infection don't shake the disease. They may go on to have three core symptoms: joint or muscle pain, fatigue, and short-term memory loss or confusion. This is called post-treatment Lyme disease syndrome. It can be hard to diagnose because it has the same symptoms as other diseases and there isn't a blood test to confirm it.

Experts aren't sure why Lyme symptoms don't always go away. One theory is that your body keeps fighting the infection even after the bacteria are gone, like an autoimmune disorder.

What Is Lyme Disease?

Lyme disease is an infection that is transmitted through the bite of a tick infected with a bacterium called *Borrelia burgdorferi*. Ticks typically get the bacterium by biting infected animals, like deer and mice. The chance of contracting the disease increases the longer the tick is attached to the body. But most people who get tick bites do not get Lyme disease, and not all ticks are infected.

Symptoms: Early Stage

Within 1 to 4 weeks of being bitten, most people have some Lyme disease symptoms. A circular rash called erythema migrans develops at the site of the bite in about 70% to 80% of cases. It slowly grows, reaching 12 inches or more. It could also:

- Feel warm, but likely won't itch or hurt

- Flare up elsewhere on the body
- Look like a target or bulls-eye as it clears up

It may look different from person to person, especially if you have darker skin.

Other Early-Stage Symptoms

Some people also report flu-like symptoms at this stage, including:

- Fever
- Chills
- Headache
- Fatigue
- Swollen lymph nodes
- Joint pain
- Muscle aches

Symptoms: As the Infection Spreads

If the disease goes untreated in its early stages, over several weeks or months it can spread to other areas of the body like your:

- Joints
- Heart
- Nervous system

You could also have more rashes and periods of pain and weakness in your arms or legs. Other symptoms include:

- Facial muscle paralysis (Bell's palsy)
- Headache
- Poor memory
- Fast heartbeat
- Shortness of breath
- Dizziness
- Inflamed brain and spinal cord

Symptoms: Late-Stage Disease

This is the most serious stage of the disease, when treatment either didn't work or never started. It usually happens many months after the first bite. Symptoms include:

- Inflamed joints, usually in the knees (arthritis)

- Nerve damage (peripheral nerves)
- Confusion
- Inflamed heart muscle and abnormal heartbeat (less common)

Do All Ticks Transmit Lyme Disease?

No. In the northeastern and north-central U.S., the black-legged tick (or deer tick) carries Lyme disease. In the Pacific coastal U.S., the western black-legged tick spreads the disease.

Other major tick species in the U.S., like the lone star tick and the dog tick, do NOT transmit the Lyme disease bacterium. But beware: All 50 states have reported Lyme disease, as well as Canada, Europe, Asia, Australia, and South America.

How Lyme Disease is NOT Spread

You can't catch Lyme disease from:

- An infected person
- Pets (unless an infected tick falls off the animal and then bites you)
- Insects like mosquitoes, flies, or fleas, although these insects can carry the borrelia bacteria
- Air, food, or water

What's NOT Lyme Disease

If a tick bites you, right away you'll probably notice a small, red bump that looks like a mosquito bite. If it disappears after a couple of days, it's not Lyme disease.

Lyme Disease-Like Illness

There's another tick-borne illness that looks a lot like Lyme disease. Southern tick-associated rash illness (STARI) has some of the same symptoms of Lyme disease, like fatigue, headache, fever, and muscle pain. But symptoms tend to happen more quickly. You'll likely just have one outbreak on your skin, and it'll be smaller and rounder than with Lyme disease. You'll also likely get better with antibiotics sooner.

Diagnosing Lyme Disease

Doctors can diagnose the disease through physical findings such as a "bull's-eye" rash along with a history of symptoms. But not everyone has the rash, and not everyone can recall being bitten. Special blood tests can be taken 3 to 4 weeks after suspected contact to confirm the diagnosis. Other tests, such as a spinal tap or skin biopsy, may be done to help diagnose or rule out other conditions.

Treating Lyme Disease

Most Lyme disease is curable with antibiotics, particularly when the infection is diagnosed and treated early. Later stages might require longer-term, intravenous antibiotics.

Is There a Lyme Disease Vaccine?

Currently, there is no human vaccine for Lyme disease. A vaccine was developed years ago for use in high-risk areas, but it is no longer available.

Preventing Lyme Disease

To avoid Lyme disease:

- Stay clear of grassy or wooded areas, especially from May to July.
- Cover exposed skin and your scalp in possible tick-infested areas.
- Apply a DEET-based insect repellent to your skin.
- Apply an insect repellent with permethrin to your clothes, but **never on your skin**.
- After spending time outside, carefully inspect yourself and pets for ticks.
- Wash your skin and scalp to get rid of any loosely attached ticks.

How to Remove a Tick

If you have a tick, here's how to remove it the right way:

- Use fine-tipped tweezers to grasp the part of the tick closest to your skin. Focus on the head, not the belly.
- Slowly pull the tick straight out, without twisting it.
- Wash the bite site with soap and warm water.
- Throw the dead tick into the trash.
- Do not use a lit match, nail polish, petroleum jelly, or other topical agents in an attempt to remove a tick.

Antimicrobial resistance

Key facts

- **Antimicrobial resistance (AMR) is a global health and development threat. It requires urgent multisectoral action in order to achieve the Sustainable Development Goals (SDGs).**
- **WHO has declared that AMR is one of the top 10 global public health threats facing humanity.**
- **Misuse and overuse of antimicrobials are the main drivers in the development of drug-resistant pathogens.**
- **Lack of clean water and sanitation and inadequate infection prevention and control promotes the spread of microbes, some of which can be resistant to antimicrobial treatment.**
- **The cost of AMR to the economy is significant. In addition to death and disability, prolonged illness results in longer hospital stays, the need for more expensive medicines and financial challenges for those impacted.**
- **Without effective antimicrobials, the success of modern medicine in treating infections, including during major surgery and cancer chemotherapy, would be at increased risk.**

What are antimicrobials?

Antimicrobials – including antibiotics, antivirals, antifungals and antiparasitics – are medicines used to prevent and treat infections in humans, animals and plants.

What is antimicrobial resistance?

Antimicrobial Resistance (AMR) occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines making infections harder to treat and increasing the risk of disease spread, severe illness and death.

As a result of drug resistance, antibiotics and other antimicrobial medicines become ineffective and infections become increasingly difficult or impossible to treat.

Why is antimicrobial resistance a global concern?

The emergence and spread of drug-resistant pathogens that have acquired new resistance mechanisms, leading to antimicrobial resistance, continues to threaten our ability to treat common infections. Especially alarming is the rapid global spread of multi- and pan-resistant bacteria (also known as “superbugs”) that cause infections that are not treatable with existing antimicrobial medicines such as antibiotics.

The clinical pipeline of new antimicrobials is dry. In 2019 WHO identified 32 antibiotics in clinical development that address the WHO list of priority pathogens, of which only six were classified as innovative. Furthermore, a lack of access to quality antimicrobials remains a major issue. Antibiotic shortages are affecting countries of all levels of development and especially in health-care systems.

Antibiotics are becoming increasingly ineffective as drug-resistance spreads globally leading to more difficult to treat infections and death. New antibacterials are urgently needed – for example, to treat carbapenem-resistant gram-negative bacterial infections as identified in the WHO priority pathogen list. However, if people do not change the way antibiotics are used now, these new antibiotics will suffer the same fate as the current ones and become ineffective.

The cost of AMR to national economies and their health systems is significant as it affects productivity of patients or their caretakers through prolonged hospital stays and the need for more expensive and intensive care.

Without effective tools for the prevention and adequate treatment of drug-resistant infections and improved access to existing and new quality-assured antimicrobials, the number of people for whom treatment is failing or who die of infections will increase. Medical procedures, such as surgery, including caesarean sections or hip replacements, cancer chemotherapy, and organ transplantation, will become more risky.

What accelerates the emergence and spread of antimicrobial resistance?

AMR occurs naturally over time, usually through genetic changes. Antimicrobial resistant organisms are found in people, animals, food, plants and the environment (in water, soil and air). They can spread from person to person or between people and animals, including from food of animal origin. The main drivers of antimicrobial resistance include the misuse and overuse of antimicrobials; lack of access to clean

water, sanitation and hygiene (WASH) for both humans and animals; poor infection and disease prevention and control in health-care facilities and farms; poor access to quality, affordable medicines, vaccines and diagnostics; lack of awareness and knowledge; and lack of enforcement of legislation.

Present situation

Drug resistance in bacteria

For common bacterial infections, including urinary tract infections, sepsis, sexually transmitted infections, and some forms of diarrhoea, high rates of resistance against antibiotics frequently used to treat these infections have been observed world-wide, indicating that we are running out of effective antibiotics. For example, the rate of resistance to ciprofloxacin, an antibiotic commonly used to treat urinary tract infections, varied from 8.4% to 92.9% for *Escherichia coli* and from 4.1% to 79.4% for *Klebsiella pneumoniae* in countries reporting to the Global Antimicrobial Resistance and Use Surveillance System (GLASS).

Klebsiella pneumoniae are common intestinal bacteria that can cause life-threatening infections. Resistance in *K. pneumoniae* to last resort treatment (carbapenem antibiotics) has spread to all regions of the world. *K. pneumoniae* is a major cause of hospital-acquired infections such as pneumonia, bloodstream infections, and infections in newborns and intensive-care unit patients. In some countries, carbapenem antibiotics do not work in more than half of the patients treated for *K. pneumoniae* infections due to resistance.

Resistance to fluoroquinolone antibiotics in *E. coli*, used for the treatment of urinary tract infections, is widespread.

There are countries in many parts of the world where this treatment is now ineffective in more than half of patients.

Colistin is the only last resort treatment for life-threatening infections caused by carbapenem resistant Enterobacteriaceae (i.e. *E. coli*, *Klebsiella*, etc). Bacteria resistant to colistin have also been detected in several countries and regions, causing infections for which there is no effective antibiotic treatment at present.

The bacteria *Staphylococcus aureus* are part of our skin flora and are also a common cause of infections both in the community and in health-care facilities. People with

methicillin-resistant *Staphylococcus aureus* (MRSA) infections are 64% more likely to die than people with drug-sensitive infections.

In 2019, a new AMR indicator was included in the SDG monitoring framework. This indicator monitors the frequency of bloodstream infections due to two specific drug resistant pathogens: methicillin-resistant *Staphylococcus aureus* (MRSA); and *E. coli* resistant to third generation cephalosporins (3GC). In 2019, 25 countries, territories and areas provided data to GLASS on blood-stream infections due to MRSA and 49 countries provided data on bloodstream infections due to *E.coli*. While the data are still not nationally representative, the median rate observed for methicillin-resistant *S. aureus* was 12.11% (IQR 6.4–26.4) and that for *E. coli* resistant to third generation cephalosporins was 36.0% (IQR 15.2–63.0).

Widespread resistance in highly variable strains of *N. gonorrhoeae* has compromised the management and control of gonorrhoea. Resistance has rapidly emerged to sulphonamides, penicillins, tetracyclines, macrolides, fluoroquinolones, and early generation cephalosporins. Currently, in most countries, the injectable extended-spectrum cephalosporin (ESC) ceftriaxone is the only remaining empiric monotherapy for gonorrhoea.

Drug resistance in mycobacterium tuberculosis

Antibiotic resistant Mycobacterium tuberculosis strains are threatening progress in containing the global tuberculosis epidemic. WHO estimates that, in 2018, there were about half a million new cases of rifampicin-resistant TB (RR-TB) identified globally, of which the vast majority have multi-drug resistant TB (MDR-TB), a form of tuberculosis that is resistant to the two most powerful anti-TB drugs. Only one-third of the approximately half a million people who developed MDR/RR-TB in 2018 were detected and reported. MDR-TB requires treatment courses that are longer, less effective and far more expensive than those for non-resistant TB. Less than 60% of those treated for MDR/RR-TB are successfully cured.

In 2018, an estimated 3.4% of new TB cases and 18% of previously treated cases had MDR-TB/ RR-TB and the emergence of resistance to new ‘last resort’ TB drugs to treat drug resistant TB poses a major threat.

Drug resistance in viruses

Antiviral drug resistance is an increasing concern in immunocompromised patient populations, where ongoing viral replication and prolonged drug exposure lead to the

selection of resistant strains. Resistance has developed to most antivirals including antiretroviral (ARV) drugs.

All antiretroviral (ARV) drugs, including newer classes, are at risk of becoming partly or fully inactive because of the emergence of drug-resistant HIV (HIVDR). People receiving antiretroviral therapy can acquire HIVDR, and people can also be infected with HIV that is already drug resistant. Levels of pretreatment HIVDR (PDR) to non-nucleoside reverse-transcriptase inhibitors (NNRTIs) among adults initiating first-line therapy exceeded 10% in the majority of the monitored countries in Africa, Asia and Latin America. The prevalence of PDR among infants is alarmingly high. In sub-Saharan Africa, over 50% of the infants newly diagnosed with HIV carry a virus that is resistant to NNRTI. Informed by these findings, latest WHO ARV guidelines now recommend the adoption of a new drug, dolutegravir, as the preferred first-line treatment for adults and children. The use of this drug is particularly urgent in averting the negative effects of resistance to NNRTIs.

Increasing levels of resistance have important economic implications since second- and third-line regimens are much more expensive than first-line drugs. WHO's HIV drug resistance programme is monitoring the transmission and emergence of resistance to older and newer HIV drugs around the globe.

Drug resistance in malaria parasites

The emergence of drug-resistant parasites poses one of the greatest threats to malaria control and results in increased malaria morbidity and mortality. Artemisinin-based combination therapies (ACTs) are the recommended first-line treatment for uncomplicated *P. falciparum* malaria and are used by most malaria endemic countries. ACTs are a combination of an artemisinin component and a partner drug. In the WHO Western Pacific Region and in the WHO South-East Asia Region, partial resistance to artemisinin and resistance to a number of the ACT partner drugs has been confirmed in Cambodia, Lao People's Democratic Republic, Myanmar, Thailand, and Viet Nam through studies conducted between 2001 and 2019. This makes selecting the right treatment more challenging and requires close monitoring.

In the WHO Eastern Mediterranean Region, *P. falciparum* resistance to sulfadoxine-pyrimethamine led to artesunate-sulfadoxine-pyrimethamine failures in some countries, necessitating a change to another ACT.

In Africa, evidence has recently been published showing emergence of mutations linked to partial artemisinin resistance in Rwanda. So far, ACTs that have been

tested remain highly efficacious. However, further spread of resistance to artemisinin and ACT partner drugs could pose a major public health challenge and jeopardize important gains in malaria control.

Drug resistance in fungi

The prevalence of drug-resistant fungal infections is increasing and exasperating the already difficult treatment situation. Many fungal infections have existing treatability issues such as toxicity especially for patients with other underlying infections (e.g. HIV). Drug-resistant *Candida auris*, one of the most common invasive fungal infections, is already widespread with increasing resistance reported to fluconazole, amphotericin B and voriconazole as well as emerging caspofungin resistance.

This is leading to more difficult to treat fungal infections, treatment failures, longer hospital stays and much more expensive treatment options. WHO is undertaking a comprehensive review of fungal infections globally and will publish a list of fungal pathogens of public health importance, along with an analysis of the antifungal development pipeline.

Need for coordinated action

AMR is a complex problem that requires a united multisectoral approach. The One Health approach brings together multiple sectors and stakeholders engaged in human, terrestrial and aquatic animal and plant health, food and feed production and the environment to communicate and work together in the design and implementation of programmes, policies, legislation and research to attain better public health outcomes.

Greater innovation and investment is required in operational research, and in research and development of new antimicrobial medicines, vaccines, and diagnostic tools especially those targeting the critical gram-negative bacteria such as carbapenem-resistant Enterobacteriaceae and *Acinetobacter baumannii*.

The launch of the Antimicrobial Resistance Multi Partner Trust Fund (AMR MPTF), the Global Antibiotic Research & Development Partnership (GARDP), AMR Action Fund and other funds and initiatives could fill a major funding gap. Various governments are piloting reimbursement models including Sweden, Germany, the USA and the United Kingdom. More initiatives are needed to find lasting solutions.

Global Action Plan on Antimicrobial Resistance (GAP)

Globally, countries committed to the framework set out in the Global Action Plan¹ (GAP) 2015 on AMR during the 2015 World Health Assembly and committed to the development and implementation of multisectoral national action plans. It was subsequently endorsed by the Governing Bodies of the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE). To ensure global progress, countries need to ensure costing and implementation of national action plans across sectors to ensure sustainable progress. Prior to the endorsement of the GAP in 2015, global efforts to contain AMR included the WHO global strategy for containment of Antimicrobial Resistance developed in 2001 which provides a framework of interventions to slow the emergence and reduce the spread of AMR.

Tripartite Joint Secretariat on Antimicrobial Resistance

The political declaration at the UN High Level Meeting on AMR, committed to by Heads of State at the United Nations General Assembly in New York in September 2016, confirmed a strong focus on a broad, coordinated approach that engages all including the human, animal, plant and environmental health sectors. WHO is working closely with FAO and OIE in a 'One Health' approach to promote best practices to reduce the levels of AMR and slow its development.

The Interagency Coordination Group (IACG) on AMR was convened by the Secretary-General of the United Nations after the UN High-Level Meeting on Antimicrobial Resistance in 2016. The IACG brought together partners across the UN, international organizations and individuals with expertise across human, animal and plant health, as well as the food, animal feed, trade, development and environment sectors, to formulate a plan for the fight against antimicrobial resistance. The Interagency Coordination Group on AMR submitted its report “ [No time to wait: Securing the future from drug-resistant infections](#)” to the UN Secretary-General in April 2019. Its recommendations are now being implemented.

A tripartite joint secretariat (FAO, OIE and WHO) has been established and is hosted by WHO to drive multi-stakeholder engagement in AMR. The key governance structures agreed include the Global Leaders Group on AMR, which began its work in November 2020, the Independent Panel on Evidence for Action against AMR and the Multi-Stakeholder Partnership Platform, both of which are in the process of being established.

World Antimicrobial Awareness Week (WAAW)

WAAW was previously called World Antibiotic Awareness Week. Since 2020, it has been called World Antimicrobial Awareness Week. This reflects the broadened scope of WAAW to include all antimicrobials including antibiotics, antifungals, antiparasitics and antivirals. Held annually since 2015, WAAW is a global campaign that aims to raise awareness of antimicrobial resistance worldwide and encourage best practices among the general public, health workers and policy makers to slow the development and spread of drug-resistant infections. The Tripartite Executive Committee decided to set all future WAAW dates as 18 to 24 November. The overarching slogan used for the last 5 years was “Antibiotics: Handle with Care.” This was changed to “Antimicrobials: Handle with Care” in 2020.

The Global Antimicrobial Resistance and Use Surveillance System (GLASS)

WHO launched the Global Antimicrobial Resistance and Use Surveillance System (GLASS) in 2015 to continue filling knowledge gaps and to inform strategies at all levels. GLASS has been conceived to progressively incorporate data from surveillance of AMR in humans, surveillance of the use of antimicrobial medicines, AMR in the food chain and in the environment. GLASS provides a standardized approach to the collection, analysis, interpretation and sharing of data by countries, territories and areas, and monitors the status of existing and new national surveillance systems, with emphasis on representativeness and quality of data collection. Some WHO regions have established surveillance networks that provide technical support to countries and facilitate enrollment into GLASS.

Global Research and Development priority setting for AMR

In 2017, to guide research and development into new antimicrobials, diagnostics and vaccines, WHO developed the WHO priority pathogens list. It will be updated in 2022. On an annual basis, WHO reviews the pre-clinical and clinical antibacterial pipelines to see how the pipeline is progressing with respect to the WHO priority pathogens list. A critical gap remains in research and development, in particular for antibacterial targeting of the gram-negative carbapenem resistant bacteria.

Global Antibiotic Research and Development Partnership (GARDP)

GARDP is a not-for-profit global partnership developing treatments for drug-resistant infections that pose the greatest threat to health. GARDP works across sectors to ensure equitable access to treatments and promote their responsible use.

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\$20 for a Tutudesk can change a child's life forever.

About the Tutudesk Project

The Tutudesk project is a collaboration between the Rotary Districts of Southern Africa and the Desmond Tutu Tutudesk Campaign to bring Rotary-branded lapdesks (Tutudesks) to disadvantaged children in schools that lack proper infrastructure.

Many schools in Africa, including South and Southern Africa, lack the basic infrastructure of a school desk where pupils can sit. Without a school desk, pupils lack a firm surface for writing on, and this impairs their learning and concentration when having to write. The Tutudesk, named after Archbishop Emeritus and Nobel Peace Prize Laureate Desmond Tutu, is a lapdesk that sits comfortably on a child's lap or knees and provides a firm surface for writing. This assists both concentration and learning.

The desk (strictly a "lapdesk") is Rotary-branded and has printed educational material structured both to stimulate early learners and also to invite deeper and advanced learning. The main objective of the project is to improve academic outcomes at the early childhood, primary, and secondary levels, in collaboration with local school officials.

The Rotary Districts of Southern Africa and the Tutudesk Organisation

Perhaps a critical question is why the partnership with the Desmond Tutu Tutudesk Campaign. We (The Rotary Districts of Southern Africa) chose The Desmond Tutu Tutudesk Campaign as a project partner to celebrate 100 years of Rotary in Africa because

- We could Identify with the Tutudesk Campaign ideals and objectives.
- The ideals and objectives align with Rotary's Basic Education and Literacy Area of Focus.
- The project is simple and flexible in scope and contribution.
- We trust the Tutudesk Organisation as a partner and brand. It is a registered NPO with a solid track record.
- At the time of inception, it was as supported by the late Archbishop Desmond Tutu, Nobel Peace Prize Laureate.
- It has a strong family tie in that Chief Executive Officer Thandeka Tutu-Gxashe is the late Archbishop's daughter who has been named Rotary International Ambassador for Women and Girls Empowerment.
- The project's success can be measured by funds raised and desks provided.
- The Rotary brand and values are promoted on each desk.

It is noteworthy that President Jennifer Jones supports the Tutudesk Project, and several Rotary Districts including 5160 in Northern Central California have designated it their District project for 2022-23.

Evaluation Studies

Evaluation studies already conducted have demonstrated significant improvements in both the teaching process and learning process.

A 2012 Impact Study sponsored by AusAid focused on handwriting, learner experience, homework, classroom situation, and improvement in the teacher's ability to teach. Substantive improvements were recorded in all areas.

Distributing the Tutudesks

Schools lacking in basic infrastructure are identified, either through the Desmond Tutu Tutudesk Campaign or Rotarians acquainted with local conditions. Outside of South Africa, Rotarians identify the schools. Schools familiar with the project may also take the initiative in asking for assistance. The school commits to the program.

Teachers are trained on using the educational material on the desk, and the Tutudesks are distributed to the learners. The learners keep the desks throughout their school career. Six months after the initial distribution, the program is evaluated to assess the impact on teachers and pupils. The prime beneficiaries of the project are early childhood learners with the teachers as a collateral beneficiary

The Tutudesk Material and Design

The Tutudesk is made of High Impact Polystyrene (HIPS), a tough, low cost, easy to thermoform, fabricate, and machine plastic material. It has high impact strength and is easy to glue, paint, and print. The raw material is primary recycled plastic where the product has similar performance to virgin material. If there is insufficient recycled feedstock, it is supplemented with virgin feedstock. Each desk weighs just under a kilogram. The design life of the desks is for 10 years.

We are updating the original desk design which supported rote learning to one emphasising educational aspects to encourage comprehension, synthesis, and an enquiring mind. The picture shows a draft of the new desk design that is undergoing minor modifications.

Online Resources and Information

<http://www.tutudesk.org>

Several YouTube videos feature the late Archbishop Emeritus and Nobel Peace Prize Laureate Desmond Tutu including

<https://www.youtube.com/watch?v=QmcHSGyFSzE>

We are applying for a global grant in partnership with several Rotary districts including District 7930 (see below) and District 5160.

<https://disc.rotary5160.org/tutudesk-campaign/>

These districts have generated some incredible promotional material such as the March Madness Video by District 5160

<https://www.youtube.com/watch?v=m9k9DkUQVHE>

District 7930 invited us to present at one of their webinars

(<https://www.youtube.com/watch?v=22f969lQTOg>), and they also have promoted the project on their website <https://www.rotary7930.org/Stories/world-peace-understanding-webinar-recording-tutudesk-campaign>

At the Rotary International Convention in Melbourne

We extend special appreciation to HEWRAG for offering us space in HEWRAG Booth #489 in the House of Friendship at the International Convention in Melbourne and for providing time for us to speak at their Annual General Meeting and Educational Program on Sunday, May 28 from 4:30-6:00 PM in Meeting Room 209.

If you're at the Convention, we'll hope to see you at the Booth and the Annual General Meeting.

For more information

Thank you for your interest in this important project. We hope we've provided some insight into the Tutudesk project, answered questions you may have, and sparked an enthusiasm potentially leading to support.

With other questions and for more information about the project and providing support, please contact me at francis@callard.co.za

Francis Callard

Northcliff Rotary Club

PDG District 9400

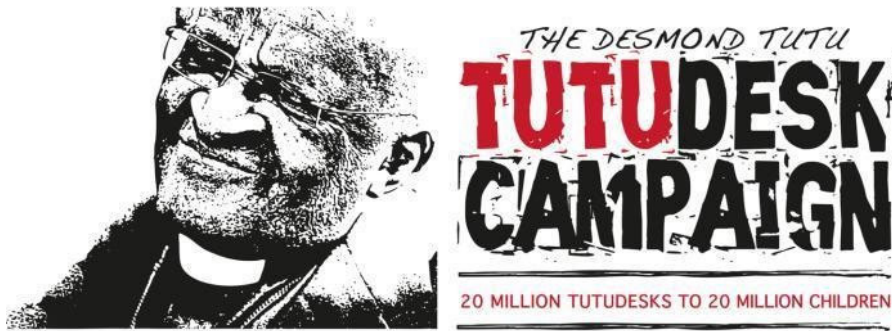
Peace Scholarship Sub Committee Chair 2022/23

District Grant Subcommittee Chair (part) 2022/23, 2023/24

Project Lead Southern Africa Rotary Districts TutuDesk Campaign

Asst Rotary Regional Foundation Coordinator Region 28 2022/23, 2023/24

Proud to partner with Tutudesk



The Tutudesk Logo

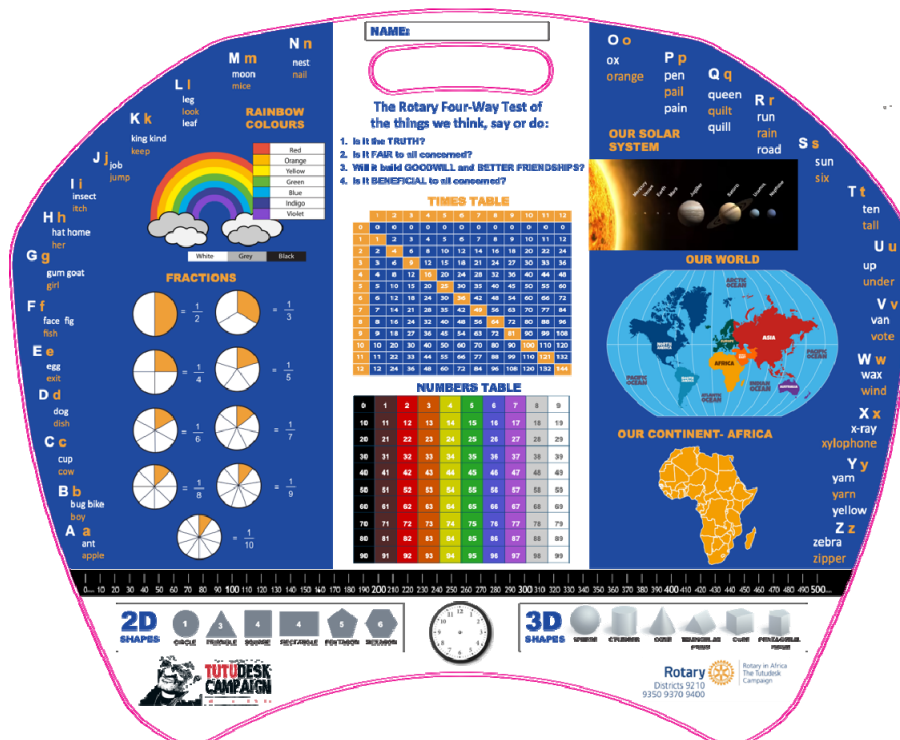


Rotary International President Jennifer Jones and her husband, Nick, with Desmond Tutu's daughter, Thandi Tutu-Gxashe, CEO of the Tutudesk NGO



Archbishop Emeritus and Nobel Peace Prize Laureate Desmond Tutu speaking about the Tutudesk





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The goal of the Health Education and Wellness Rotary Action Group is to promote good health and wellness through healthy lifestyle choices and disease prevention. The emphasis is on building awareness, promoting education, and providing information to help achieve and maintain good health and to utilize effective prevention in an integrated way. Rotary members are encouraged to promote the action group in their districts and especially in their clubs.

The Health Education and Wellness Rotary Action Group operates in accordance with Rotary International policy but is not an agency of or controlled by Rotary International

