



# INDIAN SOCIETY FOR ADULT IMMUNIZATION

»»» NEWSLETTER «««

# THE IMMUNE

Harnessing Immunity



# About Indian Society for Adult Immunization



**Dr. Sourabh Kole**  
Founder President  
Indian Society For Adult  
Immunization

Greetings from Indian Society for Adult Immunization!

Our society started its voyage almost 10 years back, when I was working in critical care for quite a long time. I realized that Vaccine has a major role to prevent the patient being critically ill, and even if he is critically ill, the vaccines can definitely minimize morbidity. So, we planned to form a society which aims to promote health and well-being of individuals through vaccination, especially through adult immunization in our country, which was often not given much importance. Initially it was very difficult to talk about preventing disease and its complications through vaccination! But times have changed...

In 2019, during the National Conference of API, we thought that why cannot we do it in a better way? I along with Dr. P. S. Karmakar and some of my very learned colleagues started seriously thinking about how can we go ahead. In 2020, we planned to organize a National Congress but it failed again due to the COVID pandemic, which wreaked havoc across boundaries! So many lives were lost... so many doctors, nurses, and healthcare workers died. Then the COVID vaccines came and gradually we gained back the lost control! After this pandemic, the awareness on adult immunization has skyrocketed...people now talk about adult vaccination.

In 2022, April during World Immunization week with renewed interest we were able to organize a virtual World Congress on Adult Immunization, where faculties from India and at least nine faculties from abroad joined virtually to discuss the issue of adult vaccination. Almost 1700 delegates participated in that program. The success of the virtual Congress gave us hope and courage to talk more on the issues related to adult immunization and hence with lots of vigor we had planned to organize the first in-person conference on Adult immunization and allied medicine in India. Many of our eminent colleagues like Dr. Rina Ghosh, Dr. BA Muruganathan, Dr. Randeep Guleria, and many others have been there through thick and thin from the very beginning of the Indian Society for Adult Immunization (ISAI). Our society is also fortunate to have young, energetic minds in the like of Dr. Rivu, Dr. Debdutta, Dr. Satabdi, Dr. Debayan,, Dr. Arkaprovo and many others. The Society started its journey years back, but ultimately, it took a decade to strengthen its footprint in our country.

As a Society, we believe in taking this adult immunization agenda forward through an organized effort to promote the health and well-being of individuals, especially of adults all over the country. I am sure this society will continue to grow and succeed with all your blessings and active participation.

Long Live ISAI...

Thank you.

**Dr. Sourabh Kole**  
Founder President  
Indian Society For Adult Immunization



# About Indian Society for Adult Immunization



**Dr. (Prof.) Partha S. Karmakar**  
Hon. Secretary  
Indian Society of Adult Immunization

**"I guess limping of ISAI is over"**

Hello friends,  
Wish you seasons' greetings.

We started our journey in the year 2013 . Initially we had so many hurdles to overcome to get our body in shape - starting from society registration, acute financial crisis , paucity of manpower. We were only a few like-minded doctors who had this idea to form this society with strong will within. We all know adult immunization could be one of the most important steps to prevent antibiotic resistant infections, but this domain of medicine is still utterly neglected.

In the year 2020 we planned to hold a National Conference in April 2020 in spite of all odds like financial crisis, manpower, negative look from colleagues and many other things. We went ahead with our indomitable desire but faltered due to imposed lockdown as a result of COVID pandemic situation.

This was really a serious setback for all of us and at that time we again started limping but we didn't know that this is a boon in disguise - as after the pandemic situation is over, you all will definitely be of opinion that we doctors, are now more cautious about adult immunization than ever before.

We now have excellent blending of new vibrant young members and experienced senior persons in this society to continue the various work of adult immunization and in last one year, after the COVID pandemic is thought to be over, we could organize the following programs since April 2022:-

1. World Congress on Adult Immunization (Virtual) - 23rd and 24th April 2022 in world immunization week.
2. ISAICON'23 - First ever annual conference of ISAI on 4th and 5th February 2023 in Science City, Kolkata.
3. Observing World Immunization Week (24th to 30th April 2023) - for the second consecutive year on behalf of ISAI through various programs like -
  - Hepatitis B immunization to medical professionals at Priyambada School of Nursing, New Town.
  - Public awareness program on importance of Adult Immunization.
  - Scientific programs for doctors. (on different days of this immunization week)

We now express our great pleasure to have come out with a first ever 'News Letter' from ISAI named "The Immune" and it will be published every quarterly with an idea to increase awareness & updating knowledge on Adult Immunization among doctors, paramedical, and general people at large to make our mission a success.

To conclude, I appeal to all the readers of this newsletter to get associated with this society actively and feel free to come forward with your suggestions and valued opinion so that we can march forward in a better and faster way to achieve our goal, to be from pie size to pulm size society.

Thank you,

*P.S. Karmakar*

**Dr. (Prof.) Partha S. Karmakar**  
Hon. Secretary  
Indian Society of Adult Immunization



# MISSION AND GOALS

## A BRIEF OVERVIEW

The Indian Society for Adult Immunization (ISAI) is a non-profit organization dedicated to promoting adult immunization as a crucial aspect of preventive healthcare in India. Our mission is to create awareness, advocate for policies, and provide resources to ensure that adults in India are protected against vaccine-preventable diseases through immunization.

Our goals are:

1. **Advocacy:** ISAI aims to advocate for policies and guidelines that promote adult immunization at the national, state, and local levels. We collaborate with government agencies, healthcare organizations, professional societies, and other stakeholders to promote evidence-based immunization practices for adults in India.
2. **Awareness:** ISAI strives to create awareness among the general public, healthcare professionals, and policymakers about the importance of adult immunization. We provide educational resources, conduct awareness campaigns, and engage in community outreach activities to highlight the benefits of adult immunization in preventing diseases, protecting individuals, and reducing the burden on public health.
3. **Education:** ISAI is committed to providing accurate and up-to-date information on adult immunization to healthcare professionals, policymakers, and the general public. We conduct educational programs, workshops, seminars, and webinars to enhance knowledge, skills, and understanding of adult immunization best practices, vaccine safety, and vaccine-preventable diseases.
4. **Collaboration:** ISAI promotes collaboration among various stakeholders involved in adult immunization, including healthcare professionals, policymakers, researchers, community organizations, and patient advocacy groups. We aim to create a collaborative platform to exchange ideas, share resources, and work together to improve adult immunization rates and outcomes in India.
5. **Support:** ISAI seeks to support individuals and organizations engaged in promoting adult immunization. We provide opportunities for volunteering, donations, and membership to individuals and organizations interested in supporting our mission. We also offer guidance, resources, and networking opportunities to those involved in adult immunization advocacy efforts.

Together, we strive to make a positive impact on adult immunization in India by advocating for policies, creating awareness, providing education, fostering collaboration, and supporting individuals and organizations dedicated to promoting adult immunization.



- >>> **ADVOCACY**
- >>> **AWARENESS**
- >>> **EDUCATION**
- >>> **COLLABORATION**
- >>> **SUPPORT**



# IMPORTANCE OF ADULT IMMUNIZATION FOR PUBLIC HEALTH



## >>> VACCINE IMPACT

As the world continues to grapple with the ongoing COVID-19 pandemic, the importance of immunization has been thrust into the spotlight. Vaccines have proven to be one of the most effective tools in preventing the spread of infectious diseases and protecting public health. While childhood immunization programs have long been established and well-known, the significance of adult immunization is often overlooked. However, adult immunization plays a critical role in safeguarding public health, and its impact cannot be overstated.



## >>> LIFE COURSE IMMUNIZATION

Vaccination is not just for children; it is a lifelong process that extends into adulthood. Vaccines are designed to prevent the spread of infectious diseases and protect individuals from serious illness, hospitalization, and even death. Adults, especially those who are elderly or have chronic health conditions, are vulnerable to a range of vaccine-preventable diseases, such as influenza, pneumonia, shingles, and hepatitis B. Vaccination is essential to ensure that adults stay healthy, maintain their independence, and avoid preventable diseases that can strain healthcare resources and increase healthcare costs.



## >>> HERD EFFECT

Moreover, adult immunization has a ripple effect on public health. Vaccines not only protect the individuals who receive them but also help prevent the spread of diseases to others, particularly those who may be more susceptible, such as infants, elderly individuals, pregnant women, and individuals with weakened immune systems. This concept, known as herd immunity, is crucial in controlling the spread of infectious diseases and protecting vulnerable populations.





## >>> BEYOND HEALTH

In addition to the individual and societal benefits, adult immunization also has economic advantages. Vaccination helps reduce the burden of vaccine-preventable diseases on healthcare systems, decreases healthcare costs associated with hospitalizations and treatments for preventable diseases, and enhances productivity by preventing illness-related work absences. Investing in adult immunization is a cost-effective public health strategy that yields long-term benefits for individuals, communities, and economies



## >>> THE BARRIERS



Despite the undeniable benefits of adult immunization, there are challenges to achieving optimal immunization rates among adults.

- *Awareness about the need for adult vaccines*
- *Knowledge about the availability and benefits of specific vaccines*
- *Access to vaccines, and*
- *Misconceptions about vaccine safety*

are some of the barriers that need to be addressed. It is imperative to engage in robust education and advocacy efforts to promote the importance of adult immunization, dispel myths, and ensure that adults receive timely and appropriate vaccines to protect their health and the health of the community

## >>> THE WAY AHEAD

In conclusion, adult immunization is a vital component of preventive healthcare and plays a pivotal role in safeguarding public health. Vaccination not only protects individuals from serious diseases but also prevents the spread of diseases to vulnerable populations, reduces healthcare costs, and enhances productivity. It is essential to raise awareness, promote education, and advocate for policies that prioritize and promote adult immunization. By working together, we can ensure that adults in our communities are adequately protected from vaccine-preventable diseases, and our overall public health is strengthened.



Let us prioritize adult immunization as a key pillar of public health, and collectively strive for a healthier and safer future.



# ADULT VACCINATION : CURRENT SCENARIO & PROSPECT IN INDIA

**DR. RINA GHOSH**

**MBBS, DCH.**

**Consultant Pediatrician, Institute of Child Health, Kolkata**

The Greeks had two gods of health: Asclepius (therapy) and Hygieia (prevention). Medicine in 20th century retains these two concepts and vaccination is a powerful means of prevention which is according to proverb is worth far more than cure.

Vaccines have secured a place amongst the greatest public health achievements of mankind.

Immunisation is one of the most convenient and safest preventive care measures in all age groups. It saves lives, improve health and ensure long term prosperity. They boost development both through direct medical savings & indirect economic benefits, educational attainment, labour productivity, income savings & investment. Today immunization can be credited with saving approximately 9 million lives a year worldwide. A further 16 million deaths a year could be prevented if effective vaccine were better deployed against all potentially vaccine preventable diseases (VPD).

Uptake of vaccines recommended for adults continues to be disappointing. Despite the proven success of vaccines other segments of medical community seldom use or think of vaccination. Adult immunization is not a routine practice for health care visits. There are very few books on vaccination. The cure is more glamorous, visible and appreciated widely whereas prevention is not apparent and realized easily.

It is important to remember the field of vaccinology evolved even when there was scanty knowledge about the principles of immunology. Chinese and the Turks in the 15th century BC where the first to attempt to induce immunity to small pox using dried crusts from small pox lesions either by inhaling the crushed lesions or by inserting them into small cuts. Vaccine development has come a long way since the first experiments of Edward Jenner and Louis Pasteur. Modern new improved technologies through molecular biology has made possible to improve existing vaccines and also brought the prospect to reach vaccines for parasitic diseases, cancers and other non infectious diseases. It has helped to achieve considerable progress against two great scourges: Malaria and Dengue.

There is great disparity between demand and vaccine supply which was very much overt during Corona pandemic. However industry in the developing world especially India is coming into its own with respect to manufacture of biologicals and production capacity has been increased so much so that Indian vaccine industry is now crucial in the provision of vaccines for use throughout the world. Although the problem of adequate vaccine supply is far from resolved. Another dark spot is inequality in vaccine distribution system.

Vaccine hesitancy is a real problem for proper uptake. The bright picture of vaccines is often marred with false allegations that vaccines cause variety of adverse events. Most glaring examples are association of "autism caused by MMR vaccine."

Inspite of all these problems in 21st century there are different bodies who are actively advocating vaccine uses. Let us hope for the greater uptake of vaccine uses in coming days. The burning need of the hour is to develop and establish well functioning coordinated adult vaccination centers in our country.



# VACCINE-PREVENTABLE DISEASES AMONG ADULTS IN INDIA IN DATA

## >>> INFLUENZA

Influenza, commonly known as the flu, is a respiratory illness that can result in severe illness, hospitalization, and even death, particularly in older adults and those with underlying health conditions. According to a study published in the Indian Journal of Medical Research in 2018, during the influenza seasons from 2010 to 2017 in India, there were an estimated 37,000 to 210,000 respiratory deaths annually among adults aged 30 years and older due to influenza-related acute respiratory infection.

## >>> PNEUMONIA

Pneumonia is a potentially life-threatening infection of the lungs that can result in severe illness and complications, particularly in older adults and individuals with weakened immune systems. According to a study published in The Lancet Global Health in 2020, pneumonia was responsible for an estimated 61,800 deaths in adults aged 70 years and older in India in 2017.

## >>> HEPATITIS B

Hepatitis B is a viral infection that affects the liver and can lead to chronic liver disease and other serious health complications, including liver cancer. According to a study published in the Indian Journal of Medical Research in 2019, the prevalence of chronic hepatitis B in India among adults aged 18 years and older was estimated to be around 2.9%.

## >>> TETANUS

Tetanus is a serious bacterial infection that can cause muscle stiffness and spasms and can be life-threatening. In India, tetanus is a significant public health concern, particularly among older adults. According to a study published in the International Journal of Community Medicine and Public Health in 2018, among adults aged 60 years and older in rural areas of India, the prevalence of tetanus immunity was estimated to be only 54.7%.

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3. Jindal A, et al. Prevalence of chronic hepatitis B virus infection in India: A systematic review and meta-analysis. J Viral Hepat. 2019;26(3):322-335.
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# ADULT IMMUNIZATION RECOMMENDATIONS

| Vaccine                           | Disease Prevented   | Recommended Age for Vaccination   | Dosing Schedule  | Benefits   |
|-----------------------------------|---|---|--|--|
| Influenza                         | Seasonal flu  | Annual vaccination for adults ≥ 60 years and high-risk individuals  | Annually   | Protects against seasonal flu, reduces flu-related complications and hospitalizations                            |
| Tdap                              | Tetanus, diphtheria, and pertussis (whooping cough)                               | Adults who have not received a Tdap vaccine previously  | One-time dose, followed by a Td booster every 10 years                               | Prevents tetanus, diphtheria, and pertussis, especially important for adults in close contact with infants       |
| HPV                               | Human papillomavirus  | Adults up to 45 years of age  | Two or three doses, depending on age at initiation                                   | Reduces the risk of certain cancers, including cervical, anal, and oropharyngeal cancers                         |
| Pneumococcal                      | Pneumococcal disease, including pneumonia, meningitis, and bloodstream infections | Adults ≥ 65 years and high-risk individuals   | One or two doses, depending on vaccination history and risk factors                  | Prevents pneumococcal disease, a leading cause of pneumonia, meningitis, and bloodstream infections in adults    |
| Hepatitis B                       | Hepatitis B virus infection   | Adults at risk, including healthcare workers, household contacts of people with Hepatitis B, and others with risk factors | Three doses  | Prevents hepatitis B virus infection, a serious liver disease  |
| Measles, Mumps, and Rubella (MMR) | Measles, mumps, and rubella   | Adults born after 1957 who have not received two doses of MMR vaccine   | Two doses, separated by at least 28 days   | Provides immunity against measles, mumps, and rubella, which are highly contagious viral diseases                |
| Varicella                         | Varicella (chickenpox)  | Adults without history of varicella or vaccination  | Two doses, separated by at least 28 days   | Prevents varicella, a contagious viral disease associated with complications in adults                           |
| Zoster                            | Herpes zoster (shingles)  | Adults ≥ 50 years   | Single dose  | Reduces the risk of herpes zoster and post-herpetic neuralgia, a painful condition that can occur after shingles |
| Meningococcal                     | Meningococcal disease, including meningitis and bloodstream infections            | Adults with certain risk factors or travel to areas with high meningococcal disease activity                              | One or more doses, depending on risk factors   | Protects against meningococcal disease, a severe bacterial infection   |
| Rabies                            | Rabies  | Adults at risk of exposure to rabies, such as veterinarians, animal handlers, and travelers to rabies-endemic areas       | Pre-exposure prophylaxis: three doses; Post-exposure prophylaxis: four or five doses | Provides protection against rabies, a fatal viral disease transmitted by animals                                 |



# Hit, when the iron, is hot.

**Dr. Arnab Bhattacharyya \*, Dr. Nilanjan De\*\*, Dr. Safikul Sarkar\*\***

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Since the days of recent pandemic the world population has been divided into two groups, men and women with and without masks. Whatever might be the habit, masks do prevent diseases and everybody is convinced about this fact (whether he or she uses it or not).

The sufferings of the last pandemic echoes the age old proverb “prevention is better than cure” and people are also convinced that vaccination of individuals is a must along with wearing of masks, hand washing and other preventive measures. So this has increased the acceptability of vaccination worldwide.

In India, till now we are more concerned about the vaccination in childhood and in this process the programme i.e. EPI (1978), later converted to UIP (1985), launched by Govt of India to provide several vaccines to infants, children & pregnant mothers in all districts of India, is a major success. But there is no such universal standardized adult vaccination guideline for more than 90 crores adult people (1) in India. The vaccines which are very popular among the adult population in India is Tetanus Toxoid, Anti-Rabies vaccine and perhaps the vaccine which has gained most popularity during the last pandemic is Covid-19. But with the introduction of mass vaccination programme of Covid-19, people of adult age group are now more inclined towards being vaccinated. Now there is a widespread awareness among the beneficiaries as well as medical fraternity regarding the vaccines which can be administered in the adult age group. This concept is very important, considering the fact that till now the exact burden of vaccine preventable diseases (VPD) of adult population is unknown (2) in India.

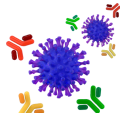
Adults are particularly vulnerable during outbreaks, due to a lack of immunization, waning immunity, age-related factors (e.g. chronic conditions and immunosenescence), and epidemiological shift. There is no national adult immunization guidelines in India, though several medical societies have published adult immunization guidelines, with varying recommendations, making it unclear who should receive which vaccine (based on age, underlying conditions etc). Other barriers to adult immunization include vaccine hesitancy, missed opportunities and cost. Steps to improve adult vaccination could include adoption of national guidelines, education of healthcare providers and the public and promotion of life-course immunization. Improving adult vaccine coverage could help reduce the burden of VPDs (vaccine preventable diseases), particularly among older adults as well as it can also prevent the spread of disease from adult to child.

So in this context our approach should be “HIT THE IRON WHEN IT IS RED HOT” i.e. our endeavour should be formation of a national health guideline for adult immunization, as the acceptability of the present adult population of India has probably increased to some extent as an after effect of mass vaccination against Covid-19. And for this to happen the health expenditure in the National budget should be increased, as India's total healthcare spending (out-of-pocket and public) at 3.6% of GDP, as per OECD (The Organization for Economic Cooperation and Development) is way lower than that of other countries and is also least among BRICS countries (3), fortunately, in the recent budget the allocation in the health sector has been raised to 2.71%.

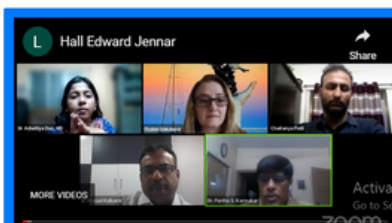
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3. India's economy needs big dose of health spending | Mint (livemint.com)





# MEMORY CELLS



**Organised First ever  
World Congress 2022 on WHO  
World Immunization Week.**

Attended by eminent National and  
International faculties &  
2000+ Online delegates

**First ever conference on  
Adult Immunization in India**

Attended by 250+ delegates



Organizing targeted  
awareness generation and  
vaccination programs during  
World Immunization Week '23.





INDIAN SOCIETY FOR  
ADULT IMMUNIZATION



INVITES YOU  
TO JOIN  
THE Adult  
Immunization  
Movement



*Be the* **CHANGE** *, you desire to see*



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