





A SOUVENIR ON

100 YEARS EVOLUTION OF THE DIRECTORATE OF PUBLIC HEALTH & PREVENTIVE MEDICINE IN TAMIL NADU



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TAMIL NADU'S REMINISCENCE ON PUBLIC HEALTH



THEME

EXCELLENCE IN PUBLIC HEALTH

A SOUVENIR ON

100 YEARS EVOLUTION OF THE DIRECTORATE OF PUBLIC HEALTH & PREVENTIVE MEDICINE IN TAMIL NADU



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தலைமைச் செயலகம் சென்னை – 600 009.

24.11.2022

வாழ்த்துச் செய்தி

பொது சுகாதாரம் மற்றும் நோய்த் தடுப்பு மருந்துத் துறை 1922–ஆம் ஆண்டு இந்தியாவில் ஆங்கிலேய அரசால் தொடங்கப்பட்டு, 2022–ஆம் ஆண்டில் 100 ஆண்டுகள் நிறைவடைந்துள்ளது. இந்தியாவிலேயே தமிழ்நாட்டில் மட்டும்தான் இத்தகைய தனி பொதுச் சுகாதார அமைப்பு உள்ளது என்பது குறிப்பிடத்தக்கது.

பொதுச் சுகாதார முயற்சிகளால் பெரியம்மை, போலியோ, நரம்புச் சிலந்தி, கருங்காய்ச்சல் போன்ற தொற்று நோய்கள் ஒழிக்கப்பட்டுள்ளன. யானைக்கால், தொழுநோய், தட்டம்மை, இரணஜன்னி, மலேரியா, மூளைக்காய்ச்சல், காசநோய் போன்ற நோய்கள் வெகுவாகக் கட்டுப்படுத்தப்பட்டுள்ளன. அண்மையில் கொரோனா வைரஸ் கட்டுப்படுத்தப்பட்டதில் பொது சுகாதாரத் துறையின் பங்கு மகத்தானது.

மருத்துவ சிகிச்சைக்காக மருத்துவமனைகளைத் தேடி மக்கள் சென்ற காலம் மாறி, நமது திராவிட மாடல் ஆட்சியில் "மக்களைத் தேடி மருத்துவம்" செல்கின்ற காலம் உதயமாகி, அனைவருக்கும் நல்வாழ்வு கிடைத்து வருவதை எண்ணி உளமகிழ்கின்றேன். தமிழ்நாட்டில் தாய்–சேய் இறப்பு விகிதக் குறியீடும் கடந்த 100 ஆண்டுகளில் தேசிய அளவில் ஒப்பிடும்போது வெகுவாகக் குறைக்கப்பட்டுள்ளது. குழந்தைகளுக்கும், கருவுற்ற தாய்மார்களுக்கும் தடுப்பூசி போடுவதிலும் தமிழ்நாடு முன்னிலையில் உள்ளது. இதிலும் பொது சுகாதாரம் மற்றும் நோய்த் தடுப்பு மருந்துத் துறையின் பங்கு மிக முக்கியமான ஒன்றாகும்.

பொது சுகாதாரம் மற்றும் நோய்த் தடுப்பு மருந்துத் துறையின் 100 ஆண்டு நிறைவு பெறுவதையொட்டி, உலகப் பொது சுகாதார மாநாடு நடைபெற உள்ளதற்கும், அதனையொட்டி விழா மலர் வெளியிடுவதற்கும் எனது பாராட்டுதல்களை தெரிவித்துக் கொள்கிறேன். விழாக் குழுவினருக்கு எனது நல்வாழ்த்துகள்.

அன்புடன்,

(மு.க.ஸ்டாலின்)

மா. சுப்பிரமணியன், பி.ஏ., எல்எல்பி., மருத்துவம் மற்றும் மக்கள் நல்வாழ்வுத் துறை அமைச்சர்



தலைமைச் செயலகம், சென்னை-600 009

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01.12.2022

வாழ்த்துச் செய்தி

பொது சுகாதாரம் மற்றும் நோய்த் தடுப்பு மருந்துத் துறை 1922–ல் தொடங்கப்பட்டு, 2022–ஆம் ஆண்டுடன் 100 ஆண்டுகள் நிறைவடைந்துள்ளது. மாநில மற்றும் மாவட்ட அளவிலான பொது சுகாதார கட்டமைப்பு (Public Health Cadre) மற்றும் சிறந்த மருத்துவர்கள், மருத்துவ பணியாளர்களைக் கொண்டுள்ள ஒரே மாநிலம் தமிழ்நாடு.

தமிழ்நாடு பொது சுகாதாரத்துறை கடந்த நூறாண்டுகளாக தமிழக அரசின் சுகாதார திட்டங்களை செயல்படுத்துவதில் பல்வேறு அறிவியல் சார்ந்த உத்திகளை கடைப்பிடித்து, தமிழகம் சுகாதார குறியீடுகளில் பல்வேறு வளர்ந்த நாடுகளுக்கு இணையாக திகழ்கிறது. நம் மாநிலத்தில் சுமார் 200–க்கும் மேற்பட்ட பொது சுகாதார வல்லுநர்கள் (Public Health Specialist) சுகாதாரத்துறை நிர்வாகப் பதவிகளில் உள்ளனர். பொது சுகாதாரத் துறையில் 50,000 மேற்பட்ட மருத்துவர்கள், செவிலியர்கள் மற்றும் மருத்துவம் சார்ந்த பணியாளர்கள் பணிபுரிந்து வருகின்றனர்.

பொது சுகாதாரம் மற்றும் நோய்த் தடுப்பு மருந்து துறையில் பணிபுரிந்து வரும் மருத்துவர்கள், செவிலியர்கள், மருந்தாளுநர்கள், அமைச்சுப் பணியாளர்கள் (ம) களப்பணியாளர்கள் பல்வேறு ஆராய்ச்சியில் ஈடுபட ஊக்குவிக்கப்படுகின்றனர். மேலும், அவர்கள் தனிப்பட்ட முறையிலோ அல்லது கூட்டு முயற்சியிலோ செய்யும் சாதனைகள் மற்றும் மருத்துவம் சார்ந்த அனுபவங்களை பகிர்ந்து கொள்ளும் வகையிலும் திறன் மேம்படும் வகையிலும் இந்த மாநாடு அமைய உள்ளது.

இந்த மாநாட்டில் WHO, UNICEF, USAID, UNDP & JSI போன்ற பன்னாட்டு நிறுவனங்களின் மருத்துவ நிபுணர்கள் மற்றும் ஒன்றிய அரசின் சுகாதார மற்றும் குடும்ப நலம் துறை சார்ந்த மருத்துவ நிபுணர்களும் பங்கேற்க உள்ளனர்.

பொது சுகாதாரத் துறை அரசின் அனைத்து திட்டங்களையும், குறிப்பாக கர்ப்பணித் தாய்மார்கள் மற்றும் குழந்தை நலம், மகளிர் நலம், தொற்றுநோய் தடுப்பு, தொற்றாநோய் தடுப்பு, பள்ளி சிறார் மற்றும் வளரிளம் பருவத்தினரின் நலம், மேலும் இதர வளர்ச்சி திட்டங்களை மக்கள் எளிதாக பயன்பெறும் வகையில் சமுதாய திட்டங்களாக சிறப்பாக செயல்படுத்தி வருவது பாராட்டக்குரியது.

பொது சுகாதாரத்துறையின் நூற்றாண்டை சிறப்பாக கொண்டாடும் விதமாக மாநாட்டிற்கு முன்பாக அனைத்து மாவட்டங்களிலும் பணியாளர்களுக்காக விளையாட்டு (ம) கலை நிகழ்ச்சிகள் நடத்தப்பட்டுள்ளது. இந்த 100 ஆண்டு நிறைவினை ஒட்டி விழிப்புணர்வு ஊர்தி (ம) அடையாள ஜோதி ஒன்றும் அனைத்து மாவட்டங்களுக்கும் சென்று சாதனை விழிப்புணர்வு செய்யப்பட்டது. நூற்றாண்டை கடந்த இந்த பொது சுகாதாரம் மற்றும் நோய்த் தடுப்பு மருந்து துறையில் பணிபுரியும் அனைத்து அலுவலர்களுக்கும், பணியாளர்களுக்கும் என்னுடைய மனமார்ந்த பாராட்டுக்களையும், வாழ்த்துக்களையும் தெரிவித்துக் கொள்கிறேன்.

அன்புடன்,

மா.சுப்பிரமணியன்)

முணைவர். ப. செந்தில்குமார், டூ.ஆ.ப., அரசு முதன்மைச் செயலாளர் மருத்துவம் – மக்கள் நல்வாழ்வுத் துறை



நாள்: 30.11.2022

வாழ்த்துச் செய்தி

இந்திய ஆங்கிலேய அரசால் கி.பி.1922-ஆம் ஆண்டு தொடங்கப்பட்ட பொது சுகாதாரம் மற்றும் நோய் தடுப்பு மருந்து துறை கி.பி.2022-ஆம் ஆண்டு 100 ஆண்டுகள் நிறைவடைந்துள்ளது மட்டற்ற மகிழ்ச்சி தருகிறது.

வருமுன் காப்போம் என்ற உயரிய நோக்கத்துடன் தமிழகத்தின் பொது சுகாதாரம் மற்றும் நோய் தடுப்பு மருந்து துறை செயல்பட்டு வருகிறது. பெரியம்மை, போலியோ, நரம்புச் சிலந்தி, கருங்காய்ச்சல் உள்ளிட்ட நோய்கள் ஒழிக்கப்பட்டும் **யாணைக்கால், தொழுநோய், தட்டம்மை, இரணஜன்னி, மலேரியா,** மூனைக்காய்ச்சல், காசநோய் உள்ளிட்ட நோய்கள் வெகுவாக கட்டுப்படுத்தியும் உலக அளவிலான பெருந் தொற்று நோயான கொரோனா நோயினை தடுப்பூசி மற்றும் தடுப்பு நடவடிக்கைகள் மூலம் கட்டுப்படுத்தியும், தாய் – சேய் இறப்பு விகிதக குறியீடும் ஆண்டுகளில் தேசிய அளவில் ஒப்பிடும்போது குறைக்கப்பட்டுள்ளது. தொற்றா நோய்களான புற்றுநோய் – உயர் இரத்த அழுத்தம் மற்றும் சர்க்கரை நோய் ஆகியவற்றை கட்டுப்படுத்<mark>துவதிலும் சுகாதாரத் துற</mark>ை அருந்தொண்டாற்றியுள்ளது. மேலும், வலுவான உட்கட்டமைப்பு வசதிகளுடன் தமிழகம் உலக நாடுகளுக்கு இன்று முன்மாதிரியாக திகழ்ந்து வருகிறது என்பது குன்றின் மேல் இட்ட விளக்காக பொது சுகாதாரம் மற்றும் நோய் தடுப்பு மருந்து துறை யின் மகத்தான சாதனைகள் திகழ்கின்றன.

பொது சுகாதாரம் மற்றும் நோய் தடுப்பு மருந்து துறையின் 100 ஆண்டு நிறைவு பெறுவதை ஒட்டி அதனை கொண்டாடும் விதமாக நடைபெற உள்ள சர்வதேச பொது சுகாதார மாநாடு வெற்றி பெறுவதற்கும், துறையின் உயிர்நாடியாக அர்ப்பணிப்புடன் பணியாற்றி வரும் அனைத்து அலுவலர்களுக்கும், பணியாளர்களுக்கும் எனது மனமார்ந்த நல்வாழ்த்துக்களை இம்மலரின் வாயிலாக தெரிவித்துக் கொள்கின்றேன்.

அரசு முதண்மைச் செயலாளர் மருத்துவம்–மக்கள் நல்வாழ்வுத் துறை

பிசந்தில் குமார்.







PREFACE

I am very happy to share this moment that our Tamil Nadu Public Health is entering into the 2^{nd} Century this year and the first State of its kind to have a Directorate of Public Health in the country. The Tamil Nadu Health Department has a unique Public Health Cadre which made it dynamic and vibrant in delivering health services up to the grass root level and in addressing major Public Health problems well ahead of others.

Our Directorate of Public Health (DPH) started way back in 1922 by British Government of India and its very fortune to have our centenary celebrations with 75 years of Independent India. Based on the recommendations of the Public Service Commission and the introduction of the new Government of India Act, 1919, Sanitation and Public Health was transferred under the Minister in-charge of the Local Self Government Department. The Sanitary Commissioner became the Director of Public Health and the department thence forth was called as Public Health Department (Tamil Nadu Public Health Code – Volume 1, page 12). The transition was done in the period of the Major A.J.H Russell, M.D., D.P.H., I.M.S who was the last sanitary commissioner and the first Director of Public Health.

V

Letter from Major A. J. H. Russell, M.D., D.P.H., I.M.S., Sanitary Commissioner. Madras, to the Secretary to Government, Local Self-Government (Public Health) Department, (through the Surgeon-General with the Government of Madras, dated 27th October 1921, D. No. 1038 V.

[Reference—Government Memorandum No. 20141-1, P.H., dated 25th October 1921—pay of Deputy Inspectors of Vaccination and Cholera Party Sanitary Inspectors.]

No. 817, P.H., 10TH JUNE 1922

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Letter from Major A. J. H. Russell, M.D., D.P.H., I.M.S., Director of Public Health, Madras, to the Secretary to Government, Local Self-Government (Public Health) Department, dated the 27th March 1922, No. D-283/Government.

The Public Health Board was constituted in 1920 in the Madras Province and the State Government, in their order No. 817, P.H., dated 10th June 1922, provided trained Health Officer in Municipalities which improved sanitary services in urban areas and later appointed District Health Officers on a provincial cadre with the introduction of District Health schemes thereby controlling Cholera and improved Vaccinations. The Regional Directors were posted for supervision and the results of this model was more encouraging especially in the control of epidemic diseases (Cholera, Plague, Relapsing fever etc.,). Our predecessors created Public Health specialization and also given constitutional powers through the Tamil Nadu Public Health Act 1939.

In addition to the above evolution in the administrative side, similar transformation happened in all the programs and it is being documented and released as souvenir in this DPHICON – 2022 Conference.

In this occasion, I thank all the Public Health staff of this Directorate for their supporting role in the evolution of this Public Health Department and I dedicate this book to the entire staff of this Directorate.

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100 YEARS

EVOLUTION OF THE DIRECTORATE OF PUBLIC HEALTH & PREVENTIVE MEDICINE IN TAMIL NADU

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100 years Evolution of the DPH & PM in Tamil Nadu

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Introduction

In 1922, Government of Tamil Nadu formed a separate Directorate exclusively for Public Health and named as **The Directorate of Public Health** and **Preventive Medicine,** which makes Tamil Nadu, the first State to have a separate Directorate for Public Health in the country. The Department's objective is to prevent disease, prolong life and promote health through organized measures. The prime functions of Public Health department include health promotion through healthy behaviour, prevention and control of Communicable and Non-Communicable diseases, provision of community based Maternity and Child Health Services including Immunization and Family Welfare Services.

The DPH & PM is celebrating it's 100 years completion in 2022 by way of organizing International Public Health Conference in Mahabalipuram from 5th to 8th December 2022. As a part of the celebrations, District wise cultural and sports events were organized and variety of programmes conducted including scientific sessions in the International conference. As a part of the event, this Souvenir is prepared to document the Evolution of the Department of Public Health and Preventive Medicine since 100 years.

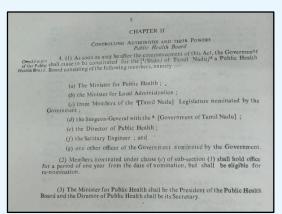
Evolution of Public Health Department - A Historical Perspective

Birth of Public Health

The concept of concern for Public Health emerged in England as many towns in England were devoid of proper water supply and drainage. Houses were closely packed without proper sunlight and ventilation. The streams were polluted and foul smelling. There was no arrangement for the disposal of garbage. In 1831, a severe cholera epidemic swept London. Further, the situation was aggravated by the migration of people without sanitary convenience. The healthy way of life depended on preventing disease, either individually or in a community and thus the term *Public Health* involved in 1848 as a law under the name **Public Health Act** in England.

The origin of the Health Department in Tamil Nadu can be traced back from 1864 when the Sanitary Department was established in the Madras Presidency and a Sanitary Commissioner was appointed, to advise and assist Government of Madras in all matters relating to Public Health in supervising the sanitary improvement of native towns and in surveying the prevalence, causes and means of preventing diseases. The salient features are as follows:

- Introduction of the Montagu-Chelmsford Reforms in 1919 ushered a new era in the history of Public Health Administration
- The Government of India Act 1919 transferred the subject of Sanitation and

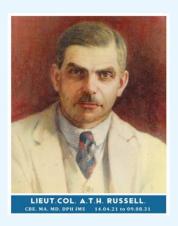


Public Health under the control of the provincial Minister in charge of local self Government. The title of Sanitary Commissioner was changed to Director of Public Health and the Sanitary Department was hence forth called as the Public Health Department.

• The first milestone in the State

Health administration was in the year 1919, when the States obtained autonomy from Central Government in Public Health matters and the Health became the State List.

 In order to provide Medical and Public health assistance to the community, the Board of Public Health was created in Madras in 1920. 26. As a result of the recommendations of the Public Services Commission and of the introduction of the new Government of India Act, 1919, Sanitation and Public Health became a transferred subject under the control of the Minister in charge of the Local Self-Government Department. The title Sanitary Commissioner was changed to Director of Public Health, and the Sanitary Department was thenceforward to be called the Public Health Department. Similar changes were made in the designations of Deputy Sanitary Commissioners who were to be known as Assistant Director of Public Health—vide G.O. No. 367, P.H., dated 8th March 1922.



- Public Health Department was started in 1922 for the prevention and control of communicable diseases and improvement of health conditions of the State
- The then Sanitary Commissioner A.J.H. Russell became the first Director of Public Health and he was the only European IMS Officer in the Public Health Department. Later he became the Public Health

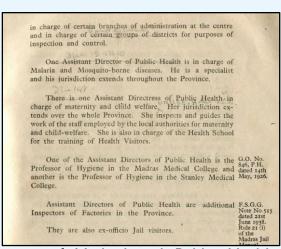
Commissioner for India, been the guiding factor in the growth of Public Health Administration in Madras and responsible for establishing Public Health Department in Madras as a separate branch of preventive health service.

- The year 1922 was significant in the history of Public Health as eight cholera parties were maintained to control cholera epidemics in rural areas.
- In 1924, the Government sanctioned the preparation of a Public Health Code. The code was completed and published in 1927. This code still remains as the most important document to guide health administrate



document to guide health administrators in the State.

• The Public Health code (Volume I & II) talks about; Duties of Departmental officers, Budget, Public Health Finance, vaccination, Fairs and Festivals, control of epidemic diseases, vital statistics, maternity and Child welfare, Miscellaneous subjects like nutrition, offensive 7 Dangerous trades, port health administration, office routine and correspondence.



• Even after the introduction of the comprehensive provincial public health staff in the districts, the Plague administration continued to be under the control of District Collectors. The Revenue Department was given the entire responsibility to prevent and combat the Plague transmission with the co-operation

of Medical and Public Health. In 1923, the Medical and Public Health Retrenchment committee had advised for the reorganization of Plague administration to avoid large expenditure. In each District, District Health Officer was made the Plague officer who with his staff should work under the instructions of the Collector.

 In 1924, the Government provincialized the services of the Municipal Health Officers and

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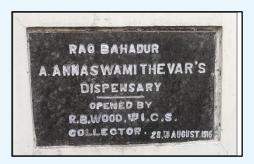
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included them in the provincial cadre thus extending the



health scheme to Municipal areas. As a result, by the year 1930, 47 Municipalities had employed the Health Officers. In the Municipalities, where Health Officers were not employed the District Medical Officer was made in charge of Public Health work.

 Subsidized Rural Medical Relief Scheme (SRMRS) was introduced in 1924 with the objective of bringing medical relief within the reach of the rural population. Later in 1926, the Public health work was transferred to the District Health Officer



of the District concerned. The DPH and the Assistant Directors of Public Health were vested with the powers to inspect the municipalities.



In 1927, Madras Public Health Service was constituted as a provincial service. In the beginning, the DPH and the other Assistant Directors of Public Health were included in this service. Later in 1933, First Class Health Officers

were also included in the Public Health Provincial Service.

 In 1929, Honorary Medical Scheme (HMS) was introduced where private practitioners were appointed as unpaid honorary medical officers instead of a full time Government Medical Officers.

- The Port health administration was vested with the DPH from 1931.
- In 1933, the Health Inspectors were given training in anti-cholera inoculations, and were utilized successfully for such activities.



In 1935 another milestone was reached by setting up a Health Unit at Poonamallee. The question of improving the Rural Health has been repeatedly forcing itself on this department for the last several years. The vast population of this presidency is mainly rural and the introduction of the District Health Scheme in 1922 has touched only a fringe of the public health problems. A small area, consisting of 25 villages in Sriperumbudur taluk was selected for this purpose. It has a population of about 42,000. The staff consists of one first-class Health Officer, four Health Inspectors, four Health visitors and eight Midwives. For want of qualified hands, only two Health visitors were appointed during the year. An Advisory Committee for the Unit with the Revenue Divisional Officer, Saidapet, as the Chairman, the Health Officer as the Secretary, and the Presidents of Panchayats, the representative of the Rockefeller Foundation, and a representative from each of the non-Panchayat villages as members was constituted. The scheme was financed jointly by the Government and the Rockefeller Foundation of America.



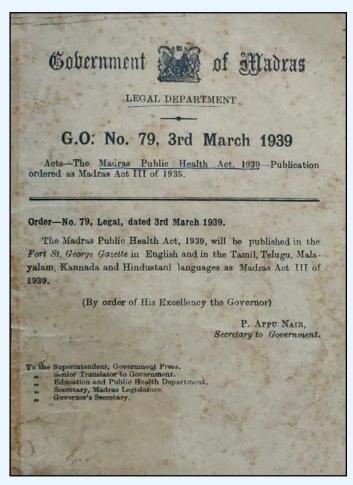
Registration of Vital Statistics

- The registration of vital statistics formed an important branch of the Public Health Administration. It was referred to as the *barometer of public health* indicating the health condition of the people. The registration of vital statistics in the Madras Presidency was first introduced in 1865.
- After the re-organization of the Public Health Department in the 1920s,
 Assistant Director of Public Health was appointed to devote his whole time to the scrutiny of the registration of births and deaths.
- After the introduction of the District Health Scheme, District Health Officers
 were assigned the duty of verifying the birth and death registers in the
 villages.
- Checking and compilation work was transferred from the offices of the District Collectors to the Office of the DPH, not to those of the District Health Officers as demanded. After this change, the compilation work in the office of the DPH was found to be "efficient and economical". Hence this system was made permanent from 1937.
- The Census report of 1931, commended the Public Health Department for its efforts to improve the registration of vital statistics. The Accuracy to Government of India in Actuarial Report attached to the Report of the Census Commissioner for India in 1931 has stated that in spite of certain defects, the registration of vital statistics in the Madras Presidency was said to be the best in India at that time. He added further that Madras alone, of all the provinces was "remarkably accurate".(Report of the Health Survey and Planning Committee, Vol.1, Ministry of Health, New Delhi)

The Madras Public Health Act 1939

The Madras Public Health Act is a compact Public health act embodying all the important public health activities. The Madras Public Health Bill was introduced in the Madras Legislative Assembly, on the 28th November 1938. This act came into force with effect from the seventh day of March 1939. The Public Health Act of 1939 was amended in 1959.

The salient features of the Act area is as follows:

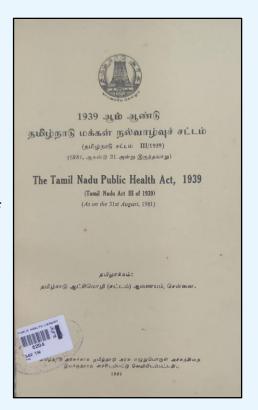


- (1) The constitution of a Public Health Board for the province.
- (2) The statutory recognition for the Director of Public Health and vesting of adequate powers to him for the effective discharge of his duties
- (3) The taking of powers
 - a) to compel the employment of Health Officers by important local authorities; and
 - b) To fix the scales and conditions of service of the public health establishments employed by local authorities.
 - (4) Those local authorities should earmark a definite percentage of their income for the public health expenditure
 - (5) The imposition of an obligation on local authorities at the discretion of Government to provide a sufficient supply of drinking water and provision for the compulsory levy of a water tax for financing water supply schemes

- (6) Effective provision for securing proper drainage and a sufficient number of public latrines etc.
- (7) The prevention and abatement of nuisances
- (8) Adequate measures for the prevention and eradication of infectious diseases
- (9) Prevention, treatment and control of venereal diseases.
- (10) Maternity and child welfare measures
- (11) Mosquito control
- (12) The Reservation of areas for residential purpose
- (13) Registration of lodging houses
- (14) Food control
- (15) Special provision regarding fairs and festivals, including the levy of pilgrim tax, in the case of waterborne, traffic and of tolls on vehicles.

Tuberculosis control and Public Health interventions

- BCG laboratory at Guindy, Madras was opened in 1948 where vaccine and purified tuberculin were manufactured to meet the needs of India, South East and Mid East countries.
- In October 1955 on the request of the Indian Government, WHO came forward to locate its centre of TB study in Madras city.
- In 1955 blood banks were opened in Tuberculosis Sanatorium, Tambaram to supply blood on demand.
- The Tuberculosis Chemotherapy center at Madras had carried out the campaign of home and sanatorium treatment for twelve months in 1956.
- A mass radiography unit was organized and it was under demonstration. All
 Government transport employees were X rayed and the public who attended
 the demonstration were also X rayed. Four TB sanatoriums were established
 in Madanappalle, Rajamundry, Tiruchirappalh and Coimbatore and proposals
 for state TB sanatorium at Madurai had been finalized to fight the scourge.



- The TB institute at Chingleput, Madras continued to function with diagnosis and treatment of outpatient cases.
- BCG vaccination campaign was conducted in full swing and by the introduction of control programme, mortality was very much reduced in rural and urban areas.

Leprosy control and Public Health Interventions

- The treatment of hydrocarpus drug was substituted with Sulphone drug from 1948. This drug had been found to cure mothers and avoid the risk of maternal deaths and childhood fever but it showed serious toxic effects.
- It was realized that though sulphones are effective in the treatment of leprosy, the cost of the drugs was prohibitive as it was dearer to the masses.
 Most of the leprosy patients were too poor to afford treatment.
- Madras State endeavored to reduce the cost of the powerful remedy. After
 extensive research work, it was decided to reduce the dosage to be injected
 to the patients thereby the cost of sulphone therapy was reduced from Rs.300
 to Rs.20.
- South Arcot was the worst affected district in the state with more number of leprosy patients. Eradication at South Arcot was possible because of mass sulphone therapy in the affected villages.
- The highly endemic districts in Madras State were South Arcot, North Arcot, Chingleput, Salem and Madras. Subsidiary centers which have been established since 1955 were engaged in mass treatment, intensive survey and observation of healthy contacts and health education about leprosy.
- A novel scheme of leprosy control work was started in the year 1959 known as the Wallajah scheme which was operative in the Wallajah Taluk of North Arcot district.
- Survey Education and Treatment units were established in the dispensaries, primary health centers with specially trained staff. Decision was also taken to convert the old subsidiary centers as well as the treatment and study centers into leprosy control units at the concerned districts.

Thus every effort was made to cover the entire state with adequate leprosy relief works. Voluntary agencies had taken great interest in the relief measures by providing sulphone tablets, vehicles for control units and skimmed milk powder. Research work was done at Chingleput, Madras, Saidapet and Vellore for new drugs especially sulphone derivates.

National Leprosy Eradication Programme (NLEP)

National Leprosy Eradication Programme was launched in collaboration with the State Government wherever leprosy was a Public Health problem. The Government of Madras created a Leprosy department under Surgeon General with the assistance of Honorary Director for Leprosy Campaign as a preliminary work. The Indian Leprosy Control Programme was launched in 1954-55. The National Leprosy Eradication Programme started its activities by 1955 – 56.

Public Health interventions in Other Diseases control

Dysentery and Diarrhoea

Dysentery and diarrhoea had shaken the healthy atmosphere of almost every district in the state since independence. Amoebic and bacillary dysentery are the two main diseases which cause morbidity. The control





measures adopted were arrangements for collection and disposal of excreta, protection of water supply sources and extermination of flies.

Intestinal worms got a foothold among the people and dietary insufficiency as well as social customs played a role in maintaining the infestations. Yet another diseases scarcely distributed was **Guinea worm**.

Chemical method to suppress this disease proved ineffective and control measure like chlorination, lime sterilization and biological methods were carried out .Without approved design of sanitary convenience in every house in villages and towns, the infestation could not be controlled. Therefore, intensive publicity was carried out and cheap designs of flush out type of water-closet latrines were popularized

Cholera

This bowel disease had existed for centuries in epidemic form of varying magnitude sweeping rural areas periodically. Its frequent occurrence was traced to be spread by pilgrims resorting to fairs and festivals at sacred places. Another reason was congregation of labourers for harvesting purposes, in large number in places without protective water supply, indiscriminate fouling of water bodies.

Chlorination of water reduced the disease burden and immunization by anticholera vaccine proved safe. The statistical data between 1947 and 1950 showed that cholera had its occurrence almost in all the districts of Madras State. The incidence of cholera recorded between 1950 and 1960 showed the rapid decline of the disease. This decline was felt with the increased provision of protected water supply, improvement in environmental condition and intensive health education.

Yaws

Yaws was another tropical infection of skin, bones and joints caused by *spirochete bacterium*. It was seen among the backward people in the plains and tribals living in hill areas in certain taluks of Coimbatore (Avinashi and Tiruppur). It was endemic in certain tracts of Madras State and affected primitive



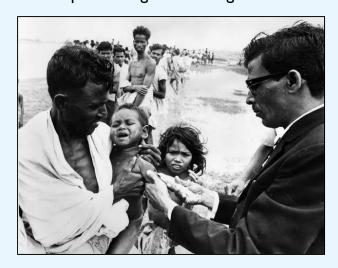
population. Patients who suffered from yaws were treated with *Penicillin*. Application of DDT was emphasised.

Small-pox

Small-pox is a major epidemic of the world caused by variola virus and is characterized by sudden onset of fever, headache, backache, vomiting and convulsion especially in children. The summer months witnessed incidence of mortality due to small-pox, in almost all



the villages in the Madras Presidency. The festivals to mother goddess were held to safeguard people from this disease. Hot weather was the time when the disease was prevalent in India and it never subsided till the rains set in. Small-pox took a heavy toll in India before the vaccination arrived in India in 1802. But till the vaccination was effectively introduced in 1927, the disease burden sustained . Small-pox eradication by mass vaccination was inaugurated in September 1960 at the national level. Epidemiological investigation of smallpox epidemics by the State Health



Authorities revealed that cases were recorded in September - November 1962. Madras reported smallpox cases throughout the year 1963 and NSEP (National Small Pox Eradication Programme) was started in eight districts. A massive international campaign by issue of stamps and medals from 1967 to 1979 led to the

eradication of smallpox.

National Smallpox Eradication Programme (NSEP)

In view of the continuous prevalence of smallpox incidence in the city of Madras, the government felt that the measures undertaken by the Madras Corporation were not fully effective and sufficient to cope up with the smallpox situation in the city. Under the Madras Public Health Act 1939, the government

empowered the Director of Public Health to inspect, control and superintend the operations of the Madras Corporation in the field of smallpox. The Director drew up a scheme for the complete eradication of smallpox by planned, systematic and intensive vaccination. The eradication programme was launched in 1962 and in Madras state, it was organized in 1963. Since 1963, every year the National Small Pox Eradication week was observed.

Fever & it's Public Health interventions

Fever cases were diagnosed as malaria, filaria, kalazar, enteric fever, influenza, typhoid and pneumonia. Malaria, the most important of VBDC caused a heavy death toll in India confined to coastal areas of Tamil Nadu.



Kalazar had its occurrence mostly in Ramanathapuram, Tirunelveli and Madras, mainly confined to coastal areas. Both rural and urban areas were reported endemic for Kalazar. Government had sanctioned a mobile unit for the treatment of the

disease and to control the vector sand fly, responsible for the transmission of the disease.

Pneumonia was seen in Madurai and enteric fever was widespread in Madras, Coimbatore and Malabar by 1950.

Anti filarial measures were taken up under the Elephantiasis Enquiry Committee supervision.

Influenza and enteric fever occurred in Madras and its research was undertaken in Government of India Influenza centre. There was increase in the incidence of influenza in 1951 and a pandemic attack in 1957 occurred affecting all the important ports in India.

Malaria

Sir Ronald Ross who was in Madras Medical Service in 1897 made the epoch making discovery that anopheles mosquito transmits malaria. Many schemes were in operation in different parts of the state.

Cerebral malaria is the most severe neurological complication of infection with Plasmodium falciparum malaria. It is a clinical syndrome characterized by coma





Preventive measures were carried out on a large scale. DDT a common insecticide against adult mosquitoes proved ineffective in spite of its use in peripheral areas for malarial eradication. In the urban and semi-urban malarial areas great emphasis was laid on anti larval measures

since the vector breed and rest mostly in wells ,OHTs, sumps with clean and non polluted water collections.

The anti larval measures consisting of systematic weekly treatment of wells and other areas with larvicide and introduction of larvivorous fish in wells was undertaken which brought down the mortality rate to a considerable extent.



National Malaria Eradication Programme (NMEP)

With the support of the World Health Organization in 1953 the National Malaria Eradication Programme was launched. With the active participation of the State government, it functioned during the

second Five Year Plan period Madras state was the first to implement the surveillance phase, an anti-parasitic operation seeking positive cases of malaria and giving on the spot treatment (**EDPT-Early Detection and Prompt Treatment**). For this task, surveillance workers were appointed and were inspected by malaria inspectors. Under the passive surveillance, the medical institutions and private practitioners were requested to report malaria cases treated by them to the concerned units.

Indoor Residual spray (IRS): Most of the insecticides having residual effect are sprayed indoors, so that mosquitoes after having bite on an infective person will rest in the house and will pick up sufficient insecticide particles sprayed on the walls and other indoor surfaces of the house and its longevity will be



reduced so much so that it does not survive to become infective. There are large number of insecticides, which are used as aduliticides for indoor residual spray. These are DDT, Malathion and different formulations of synthetic pyrethroids.

National antimalaria drug policy essentially provides a framework for the safe and effective treatment of uncomplicated and severe malaria as well as prevention of malaria in vulnerable groups, such as pregnant women and young children. Chloroquine and Primaquine are the important drugs used for Malaria treatment. National Anti Malaria Drug Policy has recently recommended Artesunate + sulfadoxine/ sulfalene combination therapy (SP –ACT) in confirmed chloroquine resistant cases.

Filaria

Filariasis was a major public health problem in the Madras state and was endemic in several districts and widespread in the districts of Chingleput, South Arcot, North Arcot and Tanjore. Other name of the disease was mycetoma or Madura leg marked by swollen leg.

The methods adopted for the control were AL work - elimination of unnecessary collection of polluted water, avoidance of man-made breeding places and channelisation of water collections (Minor engineering works). Night Blood Survey to detect MF Positive cases and treating them.

The species of the parasitic worm causing the disease was Wuchereria Bancrofti and the vector mosquito transmitting this type of infection was Culex quinquefasciatus. The Department of Public Health still continues the Filaria Units throughout the State and moving towards elimination.

Plague

Plague is an epidemic disease prevalent in certain areas with moderate cool



climate and healthy atmosphere.

The rational control of plague was to maintain rat free or ratproof houses to control the epidemic.

Temporary measures such as cyano gas fumigation to destroy rats and rat fleas, antiplague inoculations and evacuation of infected localities were carried out. By1966, no incidence was reported in the state.

Malnutrition and the Public Health interventions

- Two outstanding nutrition deficiency problems were protein malnutrition and Vitamin A deficiency.
- Since 1950, the Nutritional Bureau was reorganized and it carried out intensive work of nutritional survey in selected firkas.
- A publicity drive to make good the deficiencies in diets by use of locally grown foods was instituted.
- To combat malnutrition, encouragement was given to larger production of milk and development of fisheries. The free distribution of skimmed milk and other food supplements at maternity centres, the use of hand pound

rice in hospitals were also the measures taken to avoid malnutrition.

- Due importance was given to malnutrition related activities by the State
 Public Health Department in all its programs.
- Dietitians were employed and special diet kitchens were established in teaching hospitals.

Maternal and Infant mortality reduction by Public Health activities

Another problem in the field of public health tackled on a very well-organized footing was maternal and infant mortality. Maternity and child welfare service had been recognized as a very important branch of public health work. The high infant and maternal mortality in the province was attributed, to a certain extent, to the lack of skilled aid at child birth and facilities for ante and post natal care of the mother. In the midst of influenza and small pox epidemic, maternity and child welfare schemes were laid by the pioneering efforts of Dr.Virasinghe, who was educated at the Madras Medical College. Madras Corporation inaugurated the first child welfare scheme in 1917. The scheme was started as an experimental measure and became a permanent institution of the Corporation with gradual progress. Malnutrition was identified as one of the reason for maternal mortality and thus there was increase in maternal mortality. Deaths occurred due to anaemia in pregnancy which was a result of poor Nutrition status.

As Maternal and Child Hygiene was an integral part of Public Health, the Public health authority took utmost care for the health of the individual in the community. Madras was the only state which had a Public Health Act under which provision for maternity and child hygiene also existed. Through the practice of Public Health measures, such as vaccination, registration of births, care of the mother during her pre-natal, intra-natal and post-natal periods of pregnancy and the care of the infant and pre-school child health were imparted. Technical help and supervision were given by female medical officers, health visitors and midwives employed for this purpose.

Health Committees

- The Bhore Committee of 1946 formed the basis for organization of basic health services in India.
- The Dave Committee of 1956 set up separate Directorate for administration of indigenous medicine in Central and State.



- To survey the progress of health since independence and make proposal for further development and expansion of health services, the A.L. Mudaliar Committee was constituted in 1959.
- In 1963 Chadah Committee was appointed to examine the working of National Malaria Eradication Programme, requirements of Primary Health Centres and other health activities.
- To review the strategy related to Family Planning, the Government appointed the Mukerjee Committee in 1965 and a similar committee in 1966 to work out details of basic health services.
- The Mungalawala Committee of 1967 favoured the integrated health services for all problems.
- National Health Programmes were formulated by Government of India to control health problems common to all states.

BCG

 BCG as a prophylactic measure was given emphasis in the country's programme of tuberculosis control. The Central Government introduced BCG in 1948 with the cooperation of WHO and UNICEF. Mass vaccination in India since 1951 was the single biggest drive of BCG in the world.

Public Health Department in 1959

The Director of Public Health is the administrative head of the Public Health Department. He is assisted by-

- Assistant Director of Public Health (Malaria and other Mosquito borne disease).
- 2) Assistant Director of Public Health (Epidemiology, including Fairs and Festivals and Minor ports).
- 3) Assistant Director of Public Health (Maternal and Child Health Services and Vital Statistics).
- 4) Assistant Director of Public Health (Environmental Sanitation and Nutrition).
- 5) Assistant Director of Public Health (Tuberculosis Control & B.C.G. Campaign).
- 6) Nutrition Officer.
- 7) Health Officer for Propaganda and Publicity.
- 8) Research Health Officer.
- 9) Health Officer to assist Assistant Director of Public Health, Malaria.
- 10) Special Health Officer for UNICEF Supplies.
- 11) Statistician.
- 12) Chief Entomologist.
- 13) Medical Officer, Maternal and Child Health.
- 14) Manager.

There is a District Health Officer for each of the Districts. He is responsible for the efficient Public Health Administration of the district subject to the general control of the Executive Authority of the local body concerned. He was assisted by an Assistant District Health Officer, Health Inspectors and Health Assistants.

Out of 64 Municipalities in the State, 46 have Municipal Health Officers. Municipal Health Officers are responsible for the Public Health Administration of the Municipality subject to the control of the executive authority of the municipality concerned. The Municipal Health Officer is assisted by Sanitary Inspectors, Health Assistants, Birth and Death Registrars and other ancillary staff.

There are also Health Officers in charge of special schemes like Malaria Control, B.C.G. Vaccination Campaign, Filaria Control, Nutrition, Research, etc.,

The Professors and Assistant Professors of Social and Preventive Medicine in the Medical Colleges are Health Officers whose services are lent to the Medical Department.

Mobile Epidemic Units:

For the control of epidemics, two mobile epidemic units have been set up with four jeeps with trailors and two ambulance vans, four Health Inspectors, six drivers and four peons, in addition to the existing two units. These units are meant for the quick transport and isolation of patients for treatment in the event of sudden outbreak of epidemic diseases like cholera, small pox, dysentery etc., and for the quick movement of staff, drugs and equipments and for distribution of food supplements in food deficit areas. A sum of Rs.3.75 lakhs has been sanctioned for the establishment of the additional units.

Other Training Schemes:

- Orientation Training to Public Health and Medical Personnel at the Orientation Training Centre, Poonamallee.
- 2) Nutrition Training.
- 3) Malaria Training.
- 4) Leprosy Training.

Research Schemes:

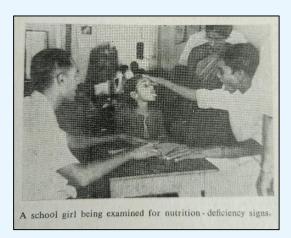
- 1) Guinea worm Research.
- 2) Nutrition Research.
- 3) Research-cum-Action Project, Poonamallee.

Health Education Bureau

A Health Education Bureau on the lines suggested by the Government
of India was established during 1961 in the state by upgrading the
Health Education and Publicity Section in the office of the Director of Public
Health.

School Health Programme

One of the components of the total comprehensive maternal and child health policy was the school health programme. Backwardness of school children was due to ill health, contact with infectious disease, verminous conditions caused by physical and mental growth.



The objectives of the programme were:

- to detect major diseases and offer medical aid,
- to maintain record of health
- to impart health education.
- In the prevention and control of communicable disease, balanced diet, personal and environmental hygiene, celebration of National Cleanliness
 Day, Anti-Fly week and smallpox eradication drive were initiated.
- During the second five year plan period, medical inspection of school children of Kanyakumari district was undertaken.
- The scheme of school medical inspection was sanctioned by the government for implementation during 1965-66.
- Immunization of pre-school children with triple vaccine was launched in 1964 to stop children falling victims of whooping cough, tetanus and diptheria. This work was carried out through primary health centres.
- Children below five years were immunized for which a district public health nurse in each district and additional health visitor for each primary health centre were appointed.

- Madras instituted pilot school health programme in selected primary health centers. The medical officers of primary health centres were in charge of school health programme assisted by school health visitors.
- Health propaganda and education were also carried out by the headmaster and the teachers of the school.

Maternity and child welfare measures

- Maternity and child welfare services were recognized as a very important branch of public health work. It included antenatal, intra natal, post natal services for mothers and nutritional services to infants and children under five years of age.
- An article in an international publication reports stated that 49.6% of births in Madras were in a hospital or nursing home or home deliveries (Howard C,Taylor, A Family Planning programme related to maternity services, Chicago University. Chicago, 1966.)
- By 1947 there were 3 12 maternity and child welfare centres which rose to 382 by 1948. In 1951 there were 71 maternal and child welfare centers in the whole Madras State and 25 centres in Madurai alone.
- Provision of maternity homes was another step in the development of maternity and child welfare schemes in municipal and district board and general public.
- In 1952, the advisers from regional office for South East Asia especially WHO experts on maternal and child welfare visited Madras for the development of mother and child care. The assistance of UNICEF was given to formulate the plan for operation emphasizing improvement and extension of training facilities for different types of health workers and development of maternal and child welfare in rural areas.
- UNICEF supplied drugs and diet supplements through the maternity and child welfare centres as free distribution for infants and mothers. Under long range skimmed milk feeding scheme, 40000 malnourished mothers were fed. Health services to mothers were given in 2984 maternity and child welfare centres by 1967.
- Government drew a phased programme of opening maternity centre by Panchayat Union in the state and thereby additional centres were opened during – 1967- 68.

Family Planning Programme

- Madras state took steps to implement the birth control programme officially known as the Family Planning Programme to create health awareness among the mothers.
- Family Planning training institute was opened at Government Hospital for Women and children where women nurses and men instructors were trained. To popularize surgical methods of family planning, the Government introduced Madras City Public Employees Family Welfare Scheme and a scheme for subsidizing private medical practitioners.
- The achievement of Madras State Family Planning propagation was praiseworthy. Family Planning Day was observed on the 18th of December 1959.
- The IUCD programme was implemented in major hospitals.
 Contraceptives were stocked in Family Planning Clinics and free distribution was made in rural areas.
- The rural family planning clinics were opened in Primary Health Centres in 1962-63. In 1962-63 the state won the National Award for the second time for its outstanding work in family Planning.
- Family Planning Manual copies were circulated to the health inspectors, sanitary inspectors, women medical officers, health visitors and maternity assistants in order to educate them on all technical details of the subjects.
- Current Family Welfare Methods (2022)

Temporary (Spacing) Methods (Delaying first pregnancy)	Permanent (Limiting) Methods (Limiting the family after achieving the desired family size.)
IUCD 380 A and Cu IUCD 375	Female Sterilization:
Injectable Contraceptive DMPA (Antara)	✓ Laparoscopic ✓ Minilap
Combined Oral Contraceptive (Mala-N)	
Centchromen (Chhaya)	Male Sterilization:
Emergency Contraceptive Pill (Ezy Pill/E-Pill)	✓ No Scalpel Vasectomy (NSV)✓ Conventional Vasectomy
Progesterone-Only Pill (POP)	
Male Condoms (Nirodh)	

Progress of Public Health services in Late 70s:

Upgradation of Primary Health Center:

For the first time in 1981-82, the Government sanctioned the upgradation of 15 Primary Health Centers providing for construction of a 24 bedded ward in addition to the 6 beds already available and an 'X' ray block with equipment.

Mobile Health Teams:

Tamil Nadu is the first state in India to introduce mobile health teams. As the services rendered by the primary health centers did not



reach the door steps of the rural people, the State Government introduced a new scheme of Mobile Health Services in 24 Primary Health Centers during 1977 – 78 in remote villages.

Siddha wings in Primary Health Centre:

To promote Siddha system of medicine to rural population, the Government in 1981-82 took a policy decision to open Siddha Wings in all the 407 Primary Health Centers in a phased manner.

Specialized treatment in Primary Health Centres:

To enable the Villagers to avail of modern and specialized treatment in the villages under the scheme of reorganization of medical education, 27 Primary Health Centers have been attached to the 9 medical colleges from 1981-82 onwards.

Mini Health Centres:

The Community Health Worker Scheme of the Government of India is being implemented in a modified manner by establishing mini health centers. Mini health centers are organized with the objective of encouraging Voluntary agencies to deliver comprehensive Health Care Services to the population on a co-operative basis.

Though the scheme was in the infant stage upto 1977, the scheme was given a special fill up from 1977 onwards and now there are 264 such centers. They concentrate on 1) rendering medical aid to the rural people 2)referring patients to the nearby hospitals 3)immunizing the children 4)attending to family welfare programme 5) attending to ante–natal and post natal cases 6)conducting deliveries 7) examining school children and also in a small way attending to Leprosy, TB and malaria cases.

Scheme for Management of Snake Bite Cases in Rural Areas:

With a view to rendering medical services to people in rural areas who are more exposed to snake bites, the Government have sanctioned a special scheme in 1982-83, Under the scheme, Primary Health Centres, Government dispensaries and Government Taluk Headquarters Hospitals are provided and stocked with 10 vials of anti-snake bite serum at any given point of time.

Expanded Programme of Immunization:





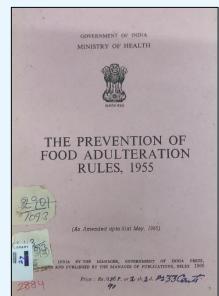
To reduce the morbidity and mortality due to the common childhood diseases of Diphtheria, Whooping Cough, Tetanus, TB, Poliomyelitis, Measles and Typhoid, intensive immunization is being done from 1979.

Prevention of Food Adulteration:

There are six Food Analysis laboratories in the State, one each at the King Institute Campus-Madras, Thanjavur, Madurai, Palayamkottai, Salem and Coimbatore. There is also one corporation Laboratory for analyzing the samples drawn in the city of Madras.

Tamil Nadu DANIDA Project:

DANIDA Assisted Tamil Nadu Area Project on Health care and Family welfare, sponsored by the



Government of India and the Government of Denmark and implemented vigorously by the Government of Tamil Nadu covered a rural population of 70 lakhs in the districts of Salem and South Arcot and is in the fourth year of implementation. The total out-lay of the project is 18-75 crores.

The project seeks to improve the health and family welfare status of the rural population, especially the week and under privileged in the two districts, by means of

- A) a target group approach
- B) community mobilization and participation
- C) multi sectoral approach.

Administrative changes in DPH

- During the year 1963, Government ordered that the supervision of primary health centres be entirely entrusted to the District Health Officers in Public Health Department under the DPH.
- The State Family Planning Officer and the State Family Planning Bureau were transferred to the administrative control of Directorate of Public Health during August 1964.
- Till 1966, the Public Health and Medical Departments were functioning as separate Departments. In 1966, they were integrated and reconstituted to form a separate Directorate of Health Services and Family Planning to facilitate an integrated approach between the Medical and Public Health Departments.

- After a period of "integration" for about 10 years from 1966 to 1976, the
 Department of Medical Services and the Public Health Department were
 separated. The Department of Public Health now function as the
 Department of Public Health and Preventive Medicine from the
 year 1976.
- The Drugs Control administration which continued under this department was separated in 1981 to form a separate Directorate.
- As per the re-organization of the Department during 1980-81, there were seven regions, each region administered by a Regional Assistant Director of Public Health and Preventive Medicine with jurisdiction over two or three Revenue Districts. There were 29 Health Unit Districts. Each Health Unit District was headed by a District Health Officer. This system functioned well with decentralization of powers. Later, for financial austerity, these regional units have been closed and again the routine system of State and District Health Administration was brought in during 1990.
- In 2011, Prevention of Food Adulteration which was one of the component of Directorate of Public Health and Preventive Medicine was carved out and formed as a separate Food Safety Department.

Health message through media - Popular slogans

- I. Be clean; Eat clean and Stay clean
- 2. Cleanliness is next to Godliness
- 3. Preserve Health through cleanliness
- 4. Health through clean hands
- 5. Dirty hands carry disease
- 6. Spitting spreads disease
- 7. Keep public parks clean
- 8. Prevent fly breeding
- 9. To protect your health, prevent fly breeding
- 10. No filth-No flies
- 11. Fight fly win health
- 12. Safe water
- 13. Boiled water Safe water
- 14. Use waste water- produce vegetables
- 15. Use latrines
- 16. Best and cheap latrines hand flush latrines
- 17. Use latrine for convenience, privacy and health

(**Source**: GO (MS) No.2359, Health.16-09-1960)

List of Notified diseases in Madras as on 31 -12-1967

- I. Cerebospinal fever
- 2. Chickenpox
- 3. Cholera
- 4. Diptheria
- 5. Leprosy
- 6. Measles
- 7. Rabies
- 8. Plague
- 9. Scarlet fever
- 10. Smallpox
- II. Typhoid
- 12. Enteric fever
- 13. Poliomyelitis
- 14. Yellow fever
- 15. Tuberculosis
- 16. Infective jaundice
- 17. Whooping cough
- 18. Virus encephalitis
- 19. Haemeorraghic fever

Source: Epidemiological Intelligence in India, 1971, p-54.

Part II Notified Infectious Diseases 62. In this part, 'notified disease' means,— (a) cerebro-spinal fever, (b) chicken-pox, (c) cholera, (d) dip.heria, (e) leprosy, (f) measles, (g) plague, (h) rabies, (i) scarlet fever, (j) small-pox, (k) typhus, or (l) any other disease—which the Government may from time to time by notification declare to be a notified disease for the purpose—of this part either generally throughout the IS ate] or in such part or parts thereof as may be specifice in the

LIST OF NOTIFIABLE DISEASES UNDER TAMIL NADU PUBLIC HEALTH ACT 1939 As per section 62 of Public Health Act. 1939 (T.N. Act III of 1939)

Sl.No	•	ic Health Act. 1939 (T.N. Act III of 1939) NAME OF THE DISEASES			
I	Cerebrospinal Fever				
2	Chickenpox				
3	Cholera	ABSTRACT			
4	Diphtheria	Infectious Diseases – Tamil Nadu Public Health Act, 1939 - Corona Virus Disease (COVID-19) declared as a notified disease throughout the State of Tamil Nadu – Threat of Outbreak of the Disease – Notification – Issued.			
5	Leprosy	HEALTH AND FAMILY WELFARE (P1) DEPARTMENT			
6	Measles	G.O.(Ms).No. 96 Dated: 15.03.2020 Vihari, Panguni – 2 Thiruvalluvar Aandu – 2051. Read:			
7	Plague	G.O.(Ms)No.95, Health and Family Welfare (P1) Department, dated: 13.03.2020.			
8	Rabies	ORDER:			
9	Scarlet Fever	In the Government Order read above, the Government have declared Corona Virus Disease (COVID-19) as a notified disease in the State of Tamil Nadu under section 62 of the Tamil Nadu Public Health Act, 1939 (Tamil Nadu Act III of 1939)			
10	Smallpox*	The following notification will be published in the <u>Tamil Nadu</u> <u>Government Gazette</u> :-			
П	Typhus	NOTIFICATION In exercise of the powers conferred by clause (a) of subsection (1) of			
12	Yellow Fever	section 76 of the Tamil Nadu Public Health Act, 1939 (Tamil Nadu Act III, 1939), the Governor of Tamil Nadu hereby declares that there is a threat of outbreak of Corona Virus Disease (COVID-19) in the State of Tamil Nadu.			
13	Enteric Fever	(BY ORDER OF THE GOVERNOR) BEELA RAJESH SECRETARY TO GOVERNMENT			
14	Tuberculosis	To The Director of Public Health and Preventive Medicine, Chennai – 600 006 The Works Manager, Government Central Press, Chennai-600 079.			
15	Whooping Cough	(for publication in the Tamil Nadu Government Gazette			
16	Infectious Hepatitis (Hep.A,B,C,D& E)				
17	Epidemic Influenza (Including Swine Flu(AHINI), Avian Influenza, Influenza Like Illness)				
18	Viral Encephalitis				
19	Haemorrhagic Fever (Including Dengue, KFD etc)				
20	Malaria				
21	Poliomyelitis				
22	Tetanus				
23	HIV/AIDS				
24	Chikungunya				
25	Leptospirosis				
26	COVID 19				
27	Mucormycosis				
28	declare to be a notified disea	government may from time to time by notification use for the purpose of this part either generally uch part or parts thereof as may be specified in the			

^{*}Small Pox globally eradicated in the year 1980. But continues to be a notifiable disease.

Research-cum-Action Project, Poonamallee:

The Research-cum- Action Project was started in September 1956 as a two year project. It is financed entirely by the Ford Foundation. The project was manned by an Administrative Officer, one Health Educator - Foreign, one Health Educator - Indian, one Research Analyst, one Research Aide, one Public Health Sanitary Engineer and three Health Inspectors.

Health Unit, Poonamallee

The Health Unit Poonamallee started functioning from Ist August 1935 for improving the public health of the rural area by starting intensive health work as an experimental measure and to demonstrate what could be done for the health and welfare of the rural population by a well organized public health effort.

The Health Unit is also a training centre for all categories of medical and health personnel, undergraduate and post-graduate students, Sanitary Inspector students, Pupil Health Visitors, Maternity Assistants and Public Health Nurses. Students from Madras Medical College, Stanley Medical College, Vellore and Mysore Medical Colleges visit the centre to study the field activities carried out there. This centre has now been converted into a Rural Health Centre. The Pre-registration Medical Graduates of the Madras Medical College undergo internship in this centre for a month in Rural Health Work.

Public Health and Preventive Medicine- The Current Scenario

The Department of Public Health and Preventive Medicine is responsible for the implementation of various State specific and National Health Programmes. This Department also plans and implements measures to prevent the occurrence of communicable diseases thereby reducing the burden of morbidity, mortality and disability in the State.

An efficient public health system helped the State to eliminate or eradicate many infectious diseases several years before the country achieved it. Small pox was eradicated in 1977, Polio in 2004, Maternal and Neonatal tetanus eliminated in 2006, Guinea worm disease not reported since 1983 and declared eradicated in 1995, Yaws cases not reported since 2006 and eradicated in 2015 and leprosy elimination goal achieved in 2005. Significant gains in maternal & infant mortality and maternal & child health have been made. Much of this success can be attributed to Tamil Nadu's establishment and scale-up of Comprehensive Emergency Obstetric and Newborn Care centres across the State. Tamil Nadu is the only State in India giving Rs 18,000 as financial assistance per pregnant mother for compensating the loss of wages during pregnancy and to meet the expenses on nutritious diet under the Dr. Muthulakshmi Reddy Maternal Benefit Scheme (MRMBS).

Tamil Nadu is currently pursuing opportunistic screening at all health facilities in the state but to close the gaps in the current program and strengthen the community linkages, the Government introduced the Population Based Screening (PBS) to improve NCD detection, referral and follow-up by enumerating all the population in the community through House-to-House visits. The program of PBS was conceptualized with the main objective of improving the screening rate and follow-up rate as well as the control rate.

The major activities undertaken by the Department of Public Health and Preventive Medicine are :provisions of primary health care which includes Maternity and Child Health Services, Immunization of children against vaccine preventable diseases control and treatment of communicable& non-communicable diseases, control of malaria, filaria, japanese encephalitis, elimination of leprosy, iodine

deficiency disorder control programme, prevention of food adulteration, health check-up of school children, health education to the community and collection of vital statistics under birth and death registration system and environmental sanitation, prevention and control of waterborne diseases like acute diarrheal diseases, typhoid, dysentery prevention and control of sexually transmitted diseases including HIV / AIDS etc.



Health facilities functioning under DPH&PM:





Health Sub Centres	8,713
Primary Health Centres Rural	1,807
Urban Primary Health Centres	460
Block PHCs	385

Other Supporting Units					
Zonal Entomological Teams	9				
State Public Health Lab	I				
District Public Health Lab	32				
Filaria Control Units	5				
Filaria and Malaria Clinics	42				
Japanese Encephalitis Control Units	3				
Water Analysis Lab	4				
Regional Vaccine Store	10				
Regional Training Institutes	7				
ANM Training Schools	П				
Upgraded PHCs	424				
Urban CHCs in Chennai Corporation	15				

The DPH&PM functions at the State level/District level and Block level as indicated below:

Director		
Director (Officers on Special Duty)		
Additional Director		
Joint Directors (Programmes)	State Level	
 Financial Advisor and Chief Accounts Officer Personnel Officer and Joint Director (Human Resource Management and Administration) Chief Entomologists and Senior Entomologists 		
 Deputy Directors of Health Services Principals of Regional Training Centres and ANM Schools Health Officers Regional Entomologists and District level Entomologists District Epidemiologist 	Region/ District Level	
 Block Medical Officers Medical Officers Institutional and Field Health Functionaries BHS, HI's, CHN's, SHN's & VHN's 	Block / Village Level	

Implementation of Various National Health Programmes at PHC level









Second Five Year Plan Schemes implemented by DPH & PM

- I) National Malaria Control Programme.
- 2) National Filaria Control Programme.
- 3) Environmental Hygiene.
- 4) B.C.G. Vaccination Campaign.
- 5) Maternal and Child Health Services.
- 6) Mobile Epidemic Units.
- 7) Training of Health Visitors.
- 8) Training of Thayis.
- 9) Health, Propaganda and Publicity.

National Health Programmes implemented by DPH & PM in 2022

- I. Reproductive and Child Health Programme
- 2. Universal Immunization Programme
- 3. National Family Welfare Programme
- 4. National Anaemia Control Programme
- National Iodine Deficiency Disorder Control Programme
- 6. National Water and Sanitation Programme
- 7. National Vector Borne Diseases Control Programme.
- 8. National Diarrhoeal Diseases Control Programme
- 9. National Tuberculosis Control Programme
- 10. National Leprosy Eradication Programme
- 11. National AIDS Control Programme
- 12. Integrated Disease Surveillance Programme
- 13. National Blindness Control Programme
- 14. National Programme for Prevention and Control of Fluorosis
- 15. National Programme for Prevention and Control of Deafness
- 16. National Vitamin A Deficiency Disorder Control Programme
- 17. National Tobacco Control Programme
- 18. National Health Mission Programmes
- 19. Tamil Nadu Health System Reforms Program

Camps and Campaigns









- Intensified Pulse Polio Immunisation (IPPI) camp
- Mission Indra Dhanush Campaign for improving immunization coverage
- Intensified Diarrhoea Control
- National Deworming Program
- Vitamin'A' campaign
- Speciality Medical Camps in rural areas
- Fever treatment camps
- School Health Camps, Health education and awareness campaigns.

Hospital on Wheels Programme:

Mobile Medical Units were launched to provide health care services in remote villages and far flung areas in 2007.



Speciality Medical Camp:

'Varumun Kappom Thittam' was introduced during 1999-2001 for the benefit of people of Tamil Nadu by free medical examination and treatment. Now 'Kalaignarin



Varumun Kappom Thittam' covers villages and towns in the State.

PICME

PICME (Pregnancy and Infant Cohort Monitoring and Evaluation) webportal was launched by Government of Tamil Nadu with an Objective to provide delivery care services continuously to pregnant / lactating mothers and child and to reduce Maternal Mortality Rate and Infant Mortality Rate by tracking high risk mothers and timely intervention.

The PICME web portal captures the details of pregnant women starting from Eligible couple registration to till 16 years age of the child through Village

Health Nurse / Urban Health Nurse. Each mother is given a unique ID called RCH ID, on confirmation and registration of pregnancy. With the Government of Tamil Nadu mandating registration of all pregnancies, this system ensures that every pregnancy gets registered. The Birth Certificate for the newborn child is also linked to the RCH ID, and will be also be issued only if RCH ID is available with the mother, making the registration compulsory from the beneficiary end. With the PICME PCH ID, the details of the mother can be viewed at any level of the health system

Dr. Muthulakshmi Reddy Maternity Benefit Scheme:



Dr. Muthulakshmi Reddy Maternity Benefit Scheme (MRMBS) was introduced by late Hon'ble Chief Minister of Tamil Nadu in the year 1989 with a noble objective of

providing assistance to poor pregnant women / mothers to meet expenses on

nutritious diet, to compensate the loss of income during motherhood, to avoid low birth weight of new born babies and aimed at reducing IMR and MMR. Presently, an amount of Rs.18,000/-is given to each eligible pregnant women in instalments.



Menstrual Hygiene Programme:

The objective of the Scheme is to increase awareness among adolescent girls on menstrual hygiene, build self-esteem and empower girls for greater socialization to increase access to use of high quality sanitary napkins and to ensure safe disposal of sanitary napkin. This Programme was launched on 27.03.2012.

Maternal Mortality Ratio:

Tamil Nadu currently ranks third lowest in Maternal Mortality Ratio (MMR) with 60 per 100,000 live births among major States in India (SRS, 2016-2018).

Infant Mortality Rate (IMR)

A significant reduction in Infant Mortality Rate (IMR) from 24 per 1000 live births in 2010 to 15 in 2018 as per Sample Registration System (SRS) Data 2018 against the National IMR of 33 are indicative of the robust policy frame work and sincere efforts of the Government to improve the health profile of the State. The State ranks as the second lowest IMR among the major States in the country.

Maternal Death Audit:

To identify the reasons behind maternal deaths, the State is conducting a compulsory audit of all maternal deaths occurring in the state since 1994.

Universal Immunization Programme:





The Universal Immunization Programme of 1986 is implemented effectively by the competent health system of Tamil Nadu in full force. The State has been vigorous in ensuring complete immunization of Children and pregnant women. The State has recorded more than 97% coverage under different vaccinations over the years.

Approximately, 10,000 outreach Immunization sessions are being conducted every week in remote and inaccessible areas of Tamil Nadu. Further, the institutional immunization services are also being strengthened to ensure complete coverage of immunization.

			IMMUNIZ	ATION SCHEDU	LE		
DOSES	IMMUNIZED	AGE	VACCINES	DOSE	ROUTE	SITE	MAX AGE
ı		At Birth	BCG	(0.05 ml until 1 month)	ID	Upper arm - LEFT	Till I Year of
		(3)		0.1ml Beyond age 1 month			Age
2			OPV Zero dose	2 drops	Oral	Oral	Within first 15 days
3			Hep B birth dose	0.5 ml	IM	Antero-lateral aspect of the Mid-thigh - LEFT	Within 24 hours
I		6th week (5)	OPV-I	2 drops	Oral	Oral	Till I Year of Age
2			Rota-I	5 drops	Oral	Oral	-do-
3	ar.)		IPV-I	0.1 ml	ID	Upper arm - RIGHT	-do-
4	Fully Immunized (19 doses in 1 year)		PCV-I	0.5 ml	IM	Antero-lateral aspect of the Mid-thigh - RIGHT	-do-
5	doses i		Penta-I	0.5 ml	IM	Antero-lateral aspect of the Mid-thigh - LEFT	-do-
I	19.61	10th week	OPV-2	2 drops	Oral	Oral	-do-
2) p	(3)	Rota-2	5 drops	Oral	Oral	-do-
3	unize		Penta-2	0.5 ml	IM	Antero-lateral aspect of the Mid-thigh - LEFT	-do-
I	Eμ	14th week	OPV-3	2 drops	Oral	Oral	-do-
2	7 7	(5)	Rota-3	5 drops	Oral	Oral	-do-
3			IPV-2	0.1 ml	ID	Upper arm - RIGHT	-do-
4			PCV-2	0.5 ml	IM	Antero-lateral aspect of the Mid-thigh - RIGHT	-do-
5			Penta-3	0.5 ml	IM	Antero-lateral aspect of the Mid-thigh - LEFT	-do-
I		9 months (After 270	MR 1st dose	0.5 ml	SC	Upper arm - RIGHT	Till 5 Years of Age
2		days) (3)	PCV booster;	0.5 ml	IM	Antero-lateral aspect of the Mid-thigh - RIGHT	Till I Year of Age
3			JE I (in selected districts)	0.5 ml	IM	Antero-lateral aspect of the Mid-thigh - LEFT	Till 15 Years of Age
I	n ars	16-24 months (4)	OPV booster	2 drops	Oral	Oral	Till 5 Years of Age
2	plete ization n 2 years		MR 2nd dose	0.5 ml	SC	Upper arm - RIGHT	Till 5 Years of Age
3	Comple Immunizz 23 doses in		JE 2(in selected districts)	0.5 ml	IM	Antero-lateral aspect of the Mid-thigh - RIGHT	Till 15 Years of Age
4	lr 23 c		DPT 1st booster	0.5 ml	IM	Antero-lateral aspect of the Mid-thigh - LEFT	Till 7 Years of Age
I		5-6 Years	DPT 2nd booster	0.5 ml	IM	Upper arm	Till 7 Years of Age
I		10th Year	Td single dose	0.5 ml	IM	Upper arm	Till 16 Years of Age
I		16th Year	Td single dose;	0.5 ml	IM	Upper arm	Till 16 Years of Age
I		Pregnant Mothers	Tdl: Early in pregnancy	0.5 ml	IM	Upper arm	As early as possible
2			Td2:Four weeks after Td1	0.5 ml	IM	Upper arm	As early as possible
3			Td Booster : If received 2 Td doses in a pregnancy within the last 3 years	0.5 ml	IM	Upper arm	
I		5-6 Years	DPT 2nd booster	0.5 ml	IM	Upper arm	Till 7 Years of Age

தொடங்கி வைப்பவர் மாண்புமிகு தமிழ்நாடு முதலமைச்சர் அவர்க இடம்: சாலை குடியிருப்பு பட்டை, சென்னை

Pulse Polio Immunization (PPI)



The State is polio free since 2004. For the eradication of poliomyelitis, Pulse Polio **Immunization** campaign was introduced in the year 1995-96 first Pulse Polio (The **Immunisation** campaign was conducted on 9th Dec 1995 and

20th January 1996), which along with efficient routine immunization coverage has successfully eliminated the dreaded disease from the State.

Electronic Vaccine Intelligence Network (e-VIN):

Electronic Vaccine Intelligence Network (e-VIN) stream lines the vaccine flow network and contributes towards strengthening health system and ensures that the idea of Universal Immunization is effectively implemented.

104 -Health Helpline

The Hon'ble Chief Minister inaugurated the '104' 24x7 health helpline cum Telemedicine service – facility, on 30.12.2013 aimed at providing free access to health information, health guidance and grievance redressal facility.



State and District Level Diseases Control Activities:



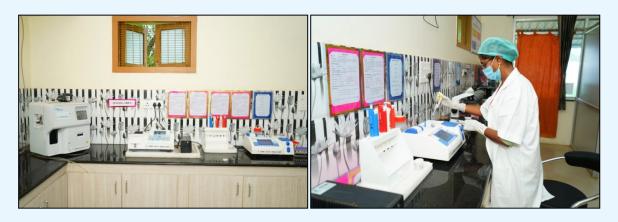
The Directorate of Public Health and Preventive Medicine is carrying out activities such as monitoring, disease surveillance to prevent the communicable disease in coordination with other allied Government departments in the state. 24x7 Emergency Operation Control Rooms are established in the state and district to coordinate the disease prevention and control measures. Deputy Director of Health Services (DDHS) in the district in synergic with the district Magistrate / District collector carry out the prevention, control and treatment measures of communicable disease. In order to prevent the spread of infection or diseases with the help of the local bodies, TWAD and other allied departments, the following measures are being carried out:

- Monitoring solid waste management and sewage treatment. Water analysis
 Ensuring the distribution of pure and safe drinking water
- Prevention of water/sewage stagnation
- Monitoring anti-larval and Vector control measures

Integrated Health Information Platform (IHIP):

Integrated Health Information Platform is a daily surveillance platform which was launched on Ist April 2021 by revamping the Weekly Surveillance programme called IDSP. The vision of IHIP is to have one stop platform for all spectrum of Health events pertaining to communicable disease, from online generations of lab confirmed case line list to generation of Early Warning Signals (EWS). The health-related data on cases/syndromes are being updated in IHIP on daily basis by both Government and Private Institutions, using S form for suspected case / syndromes, P form for probable / clinical cases and L form for Lab confirmed cases.

District Public Health Laboratory (DPHL):



District Public Health Laboratories are playing a key role in disease surveillance by rendering appropriate diagnosis in time, thereby decreasing the Morbidity and mortality in the community. At present 32 DPHL labs are functional and 6 more will be established in the newly formed Revenue Districts shortly.

- Acts as a centre for specimen collection and testing. Also transportation of the specimen to Higher centres if need.
- Helps in Early detection of clustering of cases and sending Early Warning Signals (EWS) to the District Surveillance Unit (DSU).

- Helps in Bio-Medical Waste Management Implementation and Internal and External Quality Assurance Scheme (EQAS).
- Provides training and technical support, supporting supervision to the labs in Primary Health Centres and Government Hospital.
- Operation Theatre (OT) swab analysis, water analysis

Water Analysis Laboratory:

Water Analysis Laboratories under the control of Directorate of Public Health and Preventive Medicine are functioning at regional level at 4 places - Chennai, Coimbatore, Tiruchirapalli and Tirunelveli.

24x7 Epidemic Information Cell:

This is located at Directorate of Public Health and Preventive Medicine and functioning as a contact point for Public and other Stakeholders to interact and register any public health related issues in the state. Health related information like Disease Outbreaks, Natural Disasters etc., are being collected at this cell from Public, News, Media and other sources and the same is being communicated to State/District level officers to take preventive and control measures in time.

Cigarettes and Other Tobacco Products Act (COTPA), 2003:

In order to discourage tobacco, use and protect the youth and masses from the harmful effects of tobacco usage and Second Hand Smoke(SHS), Government of India enacted "Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, (COTPA) in 2003". The Act imposes progressive restriction on all tobacco products to reduce their demand and supply.

Makkalai Thedi Maruthuvam

"Makkalai Thedi Maruthuvam"

(MTM) scheme is a flag ship program of
Government of Tamil Nadu offering holistic
and comprehensive set of "Home Based

Health Care Services" to





ensure continuum of care, sustainability of the services and also meet the health needs of beneficiaries in the family as a whole. Another important feature of the scheme is that each and every line – listed beneficiary under the scheme is brought under the **Population Health Registry** (**PHR**) as it will form the common denominator for continuous monitoring of the patients. The MTM scheme was inaugurated by Hon'ble Chief Minister of

TamilNadu on 05.08.2021 and is implemented across the State.

CIVIL REGISTRATION SYSTEM

The Civil Registration is continuous, permanent and compulsory recording of the occurrence of the vital events such as Births, Deaths and Still Births.

The Registration of Births, Deaths and Still Births at the place of occurrence is mandatory as per the Registration of Birth and Death Act, 1969 and the Tamil Nadu Registration of Birth and Death Rules, 2000.

The Director of Public Health and Preventive Medicine is the Chief Registrar of Births and Deaths in Tamil Nadu as per section 4(1) of the Registration of Birth and Death Act, 1969.

The Birth and Death registration activity is carried out by the Birth and Death Registrars of various departments viz., Municipal Administration (Corporation & Municipalities), Town Panchayats, Revenue Administration, Health and Police. At present the registration is carried out in 16348 Registration Units.

Birth and Death Registrars

Corporation/ Municipality	Sanitary Inspector
Town Panchayats	Executive Officer/ Sanitary Inspector
Village Panchayats	Village Administrative Officer
Primary Health Centres	Health Inspector
Govt. Medical Institutions	Health Inspector
Cantonment	Health Inspector / Sanitary Inspector
Estates / Plantations	Manager

Time limit for reporting

It is mandatory to report
Birth and Death within 21 days from
the date of occurrence to the
Jurisdictional Birth and Death
Registrar. Beyond 21 days it could
be registered up on payment of late



fee and orders of the prescribed authority.

Persons responsible to report Birth/Death

Place of Occurrence	Informants	
Household Events	Head of Household/ Nearest Relative/ Oldest Adult Male/Female Person	
Government and Private Medical Institution	Medical Officer in-charge or Any Person Authorized by him	
Events in Jail, Choultry, Chatram, Hostel, Dharmasalas, Estates / Plantation	Person in-charge	
New Born Child, or Dead Body found in deserted in a Public Place	Headman or other corresponding officer in case of villages. The Officer in-charge of the Local Police Station elsewhere.	

Name Registration

The name of the child shall be registered within one year from the date of registration of the birth without any late fee.

Beyond I year but within 15 years from the date of registration, the name of the child can be registered with a late fee of Rs. 200/-.

The Registrar General of India has been provided powers for an extension of 5 years period up to 31.12.2024 to register the name for the cases where the birth was already registered and the above prescribed 15 years period is completed.

The declaration of Parents/Guardian is mandatory for name registration. The name once registered cannot be changed.

Common CRS software

The Government in G.O.Ms.No.351, Health & Family Welfare (AB2) Dept. dated: 09.10.2017 have ordered for implementation of the CRS common software throughout Tamil Nadu in all Registration Units and the CRS software was put in place from 01.01.2018.

Facilities introduced

Online facility is made available for the public to download the Birth and Death Certificates at free of cost for the events registered from 01.01.2018 from the web portal https://crstn.org/birth_death_tn/.

In order to issue free birth certificate to the mother before discharge from the Government Medical Institution, the Government have ordered for the appointment of Health Inspectors as Birth and Death Registrars in all Govt. District Head Quarters Hospital, Taluk/Non-Taluk Hospital, Govt.Medical College Hospital, ESI and Women and Children Hospitals situated in Village Panchayats, Town Panchayats, Municipalities and Corporations (other than Chennai) in G.O.Ms.No.443 Health and Family Welfare Department, dt.26.09.2018.

Medical Certification of Cause of Death

The Births and Deaths are registered at the place of occurrence as per the provisions of the Registration of Births and Deaths Act, 1969 and it is implemented in the State of Tamil Nadu as per Tamil Nadu Registration of Birth and Death Rules 2000.

The scheme of Medical certification of Cause of death falls under the legal ambit of Section 10(2) and 10(3) of the Registration of the Birth and Death Act, 1969. The Registrar General of India, Ministry of Home Affairs, New Delhi who being the central authority of implementation of the Registration of Births and Deaths has directed to extend the coverage of the scheme of Medical Certification of Cause of Death to all Medical Institutions.

Tamil Nadu Population Health Registry (TN-PHR):

The State has established the Population Health Registry (PHR) for the use of the health care workers. In this platform health related data has been integrated with Unique health identification Number (UHID) which would serve as the 'Single Source of Grand Truth' for all health and related applications which aims to bring in a common denominator for all health care services and programs and also to digitalize health events at various stages.

Expected Benefits:

- Population based realistic targets for health scheme planning and implementation.
- Population Health Registry Unique Health ID (PHR UHID) will facilitate citizens
 to access the Government's welfare schemes like Makkalai Thedi Maruthuvam
 (MTM), Chief Minister's Comprehensive Health Insurance Scheme (CMCHIS).
- Data collected using TN-PHR mobile application will be used for generating automated reports under Population health Registry (PHR).
- Data available under PHR will be made available for access, update and use by the citizen concerned through mobile app interface.

Tamil Nadu Health Systems Project (TNHSP) support in Public Health Department

The Tamil Nadu Health Systems Project is one of the flagship projects of the Govt. of Tamil Nadu, implemented with assistance from the World Bank since January 2005 with the following objectives:

Objectives of the Project

- Increasing access to and utilization of health services
- Developing effective models to combat NCDs
 - Prevention and Treatment of Cardio Vascular Diseases (HT)
 - Prevention and Treatment of Diabetes Mellitus
 - Prevention and Treatment of Cancer Cervix
 - Prevention and Treatment of Cancer Breast
- Building capacity for oversight and management of health system
- Maximizing efficiency of public sector to deliver essential services

National Health Mission support in the Public Health Department

As per the National Guidelines of the Mission the State Health Society, Tamil Nadu was registered under the Tamil Nadu Societies Registration Act on 15.3.2006. Similarly all the District Health Societies have been registered under the Tamil Nadu Societies Registration Act, 1975. In the year 2013-14, with the advent of National Urban Health Mission, the Government of India has renamed the National Rural Health Mission as National Health Mission. Various programmes implemented by the DPH & PM with the support of NHM are as follows:

- National Programme for Prevention and Control of Diabetes, CPD and Stroke (NPCDCS)
- National Programme for Prevention and Control of Blindness (NPCB)
- National Programme for Prevention and Control of Deafness (NPPCD)

- National Mental Health Programme (NMHP)
- National Oral Health Programme (NOHP)
- National Program for Health Care of the Elderly (NPHCE)
- National Iodine Deficiency Disease Control Programme (NIDDCP)
- National Tobacco Control Programme (NTCP)

Maternal Health

RMNCH+A Services: The Reproductive, Maternal. Health Newborn, Child and Adolescent Health Services are based provision on of comprehensive care through the of five pillars reproductive, maternal, neonatal, child and adolescent health.



• Janani Suraksha Yojana (JSY)

The scheme provides financial assistance of Rs.700/- and Rs.600/- in rural and urban areas respectively to all mothers delivering in Government Health Institutions.

• Janani Shishu Suraksha Karyakaram (JSSK)

The entitlements under JSSK includes free cashless delivery (including caesarean), free drugs, free diagnostics, free provision of blood, free diet, and free transport to and fro to a health facility.

LaQshya

LaQshya is a Quality improvement initiative in Labour room & Maternity Operation Theatre, aiming at improving quality of care provided to mothers and newborn during intra -partum, immediate post-partum period and improving the patient satisfaction in Government Healthcare Facilities.

• Anaemia Mukt Bharat Scheme:

An intensified Iron-plus Initiative aims to strengthen the existing mechanisms and foster newer strategies for tackling anaemia. It focuses on six target beneficiary groups (6-59 months, 5-9 years, 10-19 years, Women in Reproductive age group, Pregnant Women (Since 12 weeks, Lactating mother till 180 days) through six interventions and six institutional mechanisms to achieve the envisaged target under the Anemia Mukt Bharath. Iron and Folic acid supplementation to pregnant mothers for 180 days and lactating mothers are provided. Women of Reproductive Age (WRA) in the age group of 20 to 30 years under Phase I are being provided weekly supplements of IFA (Red) tablets, Folic Acid tablets and Biannual deworming tablets (albendazole) through Immunization Day or Village Health and Nutrition Day platforms wherever feasible.

• Gestational Diabetes Control Programme:

In 2007, universal screening for gestational diabetes mellitus (GDM) was introduced in the state which detects more cases and improves maternal and offspring prognosis. The current recommendation of oral glucose challenge test is performed as screening test between 12 -16 weeks, repeat test at 24-28 weeks and 32-34 weeks of gestation

• Feeding and Dietary Charges

Diet during stay in the health institutions (up to 3 days for normal deliveries and up to 7 days for caesarean deliveries) is provided under the scheme.

• Pradan Manthri Surakshit Matrithva Abhiyan / High Risk Mother Observation:

Pradan Manthri Surakshit Matrithva Abhiyan (PMSMA) aims to provide assured, comprehensive and quality antenatal care free of cost universally to all pregnant women on the 9th of every month. PMSMA guarantees a minimum package of antenatal care services to women in their $2^{\rm nd}$ / $3^{\rm rd}$ trimester of pregnancy at designated Government health facilities. A system of mentoring by Obstetricians is placed in all districts for ensuring better and continuous monitoring of all pregnant women especially the high-risk mothers

Mentoring of High-Risk Mother

Virtual mentoring through Whatsapp groups have been created within the blocks in the districts. Mentors include Chief District Obstetricians, Mentor Obstetrician of the Block who would mentor Block Medical Officer, PHC medical officers, DMCHO, Staff Nurses and ANMs.

Baby Care Kit Scheme:



Baby Care Kit scheme is being implemented from 8th September 2015 in all the Government health facilities. The kits are issued to the mothers immediately after delivery to improve the hygiene of the mother and newborn and to reduce the post-natal infections. 16 items such as Baby Towel, Baby Dress, Baby Bed, Baby Protective Net, Baby Napkins, Baby Oil, Baby Shampoo, Baby Soap Box, Baby Nail Clipper, Baby Rattle, Baby Toy, Liquid Hand Wash, Bathing Soap, Sowbagyasundi Lehiyam, Kit Bagare given. Tamil Nadu Medical Services Corporation procures and supplying the kits.

Newborn Care Corners (NBCC)



Newborn Care Corners (NBCC) have been established in all labour rooms to provide neonatal resuscitation and essential newborn care soon after birth by trained birth attendants.

Community based Child care Interventions and Out Reach Activities:

- √ Home Based New Born Care(HBNC)
- √ Home Based Young Child Care(HBYC)
- ✓ Anemia Mukth Bharat (AMB)
- ✓ National Deworming Day Campaign
- ✓ Vitamin-A supplementation Programme
- ✓ Intensified Diarrhoea Control Fortnight Programme (IDCF)
- ✓ Social Awareness and action to Neutralize Pneumonia (SAANS)
- ✓ Mother's Absolute Affection(MAA)

Child Death Audit

The current system of conduct of Child Death Audit at the districts by District Collectors and periodic review by the Expert Committee at the State through Video Conference has provided valuable guidance for reduction of Infant Mortality in the State.

Rashtriya Bal Swasthya Karyakram (RBSK)

Rashtriya Bal Swasthya Karyakram (RBSK) is being implemented in Tamil Nadu since 2015.



- RBSK is an important initiative aiming at early identification and early intervention for children from birth to 18 years of age to cover 4 'D's viz. Defects at birth, Deficiencies, Diseases, Development delays including disability.
- ✓ All children including newborn and the children attending the Anganwadi Centres and Government/ Government-aided schools are benefitted through this programme. There are 805 mobile teams functioning all over the State.
- √ 770 mobile teams functioning in rural areas throughout the State at the rate
 of two mobile teams per block for 385 block PHCs.
- ✓ In addition to it, 15 Mobile Health Teams in Greater Chennai Corporation and 20 Mobile Health Teams in the rest of the urban areas of Tamil Nadu are functioning to cater to the needs of the urban population.

Palli Sirar Kannoli Kappom Thittam (KKT):

Kannoli Kappom Thittam is being implemented from the year 2009 onwards to screen all the students studying in 6th to 12th standard in Government and



Government aided Schools for refractive errors. Some of the students who are wearing spectacles may require new spectacles as the refractive error may change from time to time every year. It is proposed to do recheck-up of the students from

7th to 12th standards who have been provided spectacles already in the previous years in all Government and Government aided schools in the State. One or two teachers per school have been trained by the Para Medical Ophthalmic Assistants (PMOA) and they screen all the students at Schools and list out the students with vision impairment within stipulated time and send them for examination by PMOA. The PMOA examines and generates prescriptions and order for spectacles. On the receipt of the spectacle, students are issued spectacle by the PMOA in the school.

Rashtriya Kishore Swasthya Karyakram (RKSK)

The main objective of the programme is to improve nutrition, enable sexual and reproductive health, enhance mental health, prevent injuries and violence, prevent substance misuse and address conditions for NCDs in the adolescent age groups.



- The new Adolescent Health (AH) strategy focuses on age groups 10-14 years and 15-19 years with universal coverage, i.e., males and females; urban and rural; in school and out of school; married and unmarried; and vulnerable and under-served.
- The RKSK programme is implemented in 19 districts in the State. Adolescent Friendly Health Clinics (AFHCs) are successfully functioning in 245 Block PHCs. Four Peer Educators (two boys and two girls) are selected in every Village by the Village Health Water Sanitation and Nutrition Committee.
- ✓ Adolescent Health Club meeting is conducted every month for the Peer Educators at the Health Sub centre by the Village Health Nurse.
- The Adolescent Health Days are observed in every quarter to spread awareness and knowledge on the adolescent health issues at each of the Village and Town Panchayat level by the Village Health Water Sanitation and Nutrition Committee members by including the Peer Educators.

Training

Managerial Skill Training for Medical Officers:

This training is imparted to all the newly recruited Medical Officers for a period of 15 days on all health programmes being implemented by this Department and also includes their administrative role in the PHCs.

BEMONC Training (Basic Emergency Management of Obstetric & Neonatal Care):

This training is provided for a period of 6 days to all the PHC Medical Officers to upgrade the knowledge on the subject. This training is being conducted at 6 Regional Training Institutes in association with their corresponding Government Medical Colleges.



MCH Skill lab Training to Medical Officers/Staff Nurse/ANM:

MCH skill lab training is conducted periodically for Medical Officers, Staff nurses, ANM at the skill labs of all 6 Regional Training Institutes to upgrade the skill and knowledge on reproductive, maternal, new born child and adolescent health for reducing maternal and child morbidity and mortality.



Poison Management Training: Poison management training is imparted to familiarise the medical officers in handling medical emergencies and provide systematic management skills for handling poison cases.

Life Saving Anesthetic Skills Training

(LSAS): This training programme of 24 weeks is provided to MBBS doctors since 2007 and specifically focuses in developing skills of obstetric anesthesia to operationalize comprehensive emergency obstetric and new born care centers along with cardio pulmonary cerebral resuscitation.

Emergency Obstetric Care Training (EmOC):

This training is implemented to train medical officers in providing high quality emergency care services in under-served areas to prevent maternal mortality & morbidity. Intensive programme of 25 weeks training is conducted in 5 Government medical institutions since 2009.

Tribal Health

Accredited Social Health Activists (ASHAs): In tribal / hilly / remote / difficult areas, 2,650 ASHAs are being engaged in PHCs to deliver health services.

Birth Waiting Room in 17 Tribal PHCs:

In non-motorable roads and villages with a long distance to a health facility, the tribal mothers are being admitted two weeks before the Expected Date of Delivery in birth waiting rooms established in 17 PHCs in the foot hills of tribal areas for safe delivery under institutional care. In Birth Waiting Room (BWR), nutritious diet is provided to the antenatal mother & attender during their entire period of stay.

Prevention and Control of Hemoglobinopathies:

Among the South Indian States, Tamil Nadu is the first state to implement Prevention and Control of Hemoglobinopathies program for early detection of Hemoglobinopathies like Sickle Cell Anaemia, Thalassemia among the tribal population. NHM-TN along with other Directorates are screening for Hemoglobinopathies (Sickle Cell Anaemia & Thalassemia) in adolescent children studying in 10th and 12th standard and unmarried school dropouts above the age of 14 in 30 selected tribal blocks in 13 Districts since November 2017.

Mobile Medical Units:

Mobile Medical Unit covers 42 villages on an average being visited on fixed days as per the Fixed Tour Mobile Medical Units have been provided to all blocks of Tamil Nadu under NHM and they are functioning since 2009 to cover remote, hilly/tribal and inaccessible areas. This scheme has been renamed as Hospital on Wheel Programme with additional staff of one Laboratory Technician and Attendant. The Hospital on wheels consists of one Medical Officer, one nurse, one lab technician, one driver and one attendant. Each Mobile Medical Program (FTP).

Tribal Mobile Medical Units (By NGOs):

To augment the Mobile Outreach Services in tribal and hard to reach areas additionally 20 Mobile Medical Units are being operationalized through NGOs in tribal blocks of 14 Districts.



Kayakalp Award Scheme (Cleanliness Drive and Award):

Kayakalp certification ensures to promote cleanliness and enhance the quality of public health facilities through seven parameters-Hospital/Facility Upkeep, Sanitation and Hygiene, Waste Management, Infection control, Support Services, Hygiene Promotion and Cleanliness beyond Boundary Wall.



Urban Polyclinics



A polyclinic is an outpatient clinic where multiple specialties provide only outpatient services in a single facility at fixed timings, giving a comprehensive speciality care under one roof for the referred patients from UPHCs. Polyclinic is functioning in 96 Urban PHCs throughout Tamil Nadu in flexible timings between 4,30 PM to 8.30 PM and speciality services such as General Medicine, Paediatric Medicine, Dental, Ophthalmology, Obstetrics and Gynecology, Dermatology, Psychiatry, and Physiotherapy services are provided.

Mahila Arogya Samiti (MAS)

MAS is a community based federal group of around 50 to 100 households, depending upon the size and concentration of the slum population formed with 10-12 local resident women. 3,324 MAS have been approved for 11 Corporations and they are responsible for health and hygiene, behavior change promotion and facilitating community risk pooling mechanism in their coverage area.

Quality Certification Programs National Quality Assurance Standards (NQAS):

NQAS aims to match the expectations of patients through filling up the gaps in the service delivery and monitoring it by three



levels of assessments i.e. Internal Assessment, State Assessment and National Level External Assessment. NQAS assessment measures quality through eight broad areas of concern – Service Provision, Patient Rights, Inputs, Support Services, Clinical Care, Infection Control, Quality Management and Outcome. Qualified facilities are financially incentivized with an amount of Rs.10,000 per functional bed for the certified year and the subsequent two years, duly completing the assessment as per guidelines

Essential Diagnostics Services System (EDSS)

The main aim of the programme is to avoid inordinate delay in receiving the Lab reportswhich enables early diagnosis and management of diseases and reduces the Out-of-Pocket Expenditure (OOPE) of the public. The programme helps to I) Strengthening of Labs in all Government health facilities 2) Interconnecting all the Labs in Government Health facilities through LIMS (Laboratory Information Management System) and 3) Lab Sample transport mechanism through Hub and Spoke model.

e-Sanjeevani:

e-Sanjeevani
enables virtual meetings
between the patients and
doctors &specialists from
geographically dispersed
locations, through video
conferencing that occurs
in real time. At the end
of these remote



consultations, e- Sanjeevani generates an electronic prescription which can be used for sourcing medicines. e-Sanjeevani AB-HWC, the doctor-to-doctor telemedicine platform is implemented at all the Health and Wellness Centres under Ayushman Bharat Scheme of Government of India.

Untied Funds Under NHM

Primary Health Centres are given Rs.1.75 lakh per year and Health Sub Centres are given Rs.10,000 / year. These Flexi pool funds are available with the Medical Officer of the respective facilities for taking up minor civil works, minor equipment repairs, purchase of consumables, and upkeep of facilities and improvement of patient amenities.

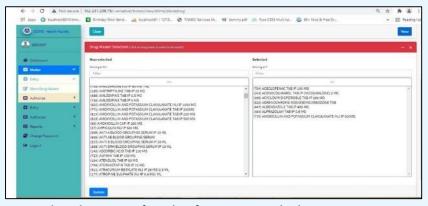
Village Health, Water, Sanitation and Nutrition Committee:

This committee provides leadership and a platform for addressing issues related to health services, raising community awareness and promoting community involvement. VHWSNC is constituted with VHN, Local Panchayat President, Anganwadi worker, Local school teacher, Health Inspector and representative of SHGs for ensuring community participation, effective communication and for prevention of diseases. Every VHWSNC is entitled to an annual untied grant of Rs. 10,000. This fund is jointly operated by Panchayath President and VHN. There are about 15,015 VHSNCs in all Village and Town Panchayats in Tamil Nadu which proactively monitors the access of healthcare services.

Role of TNMSC in Public Health

The Tamil Nadu Medical Service Corporation (TNMSC) Limited was incorporated as a Government company fully owned by the Government of Tamil Nadu under the Companies Act on IstJuly 1994.





The corporation was set up to reform and restructure the activities related to procuring drugs and other medical supplies effectively through a

centralized system for the first time in India.

Its main mandate was to procure and supply quality medicines to patients accessing public health facilities without any interruption. In the last 27 years, the system adopted by TNMSC has become a proven model in drug logistics and won appreciation worldwide and attracted the attention of the other states in the country to replicate.

The following are the major activities of TNMSC to DPH Institutions:

- Procurement, testing, storage and distribution of both generic and speciality drugs and medicines, surgical and suture consumables
- Procurement of medical equipment and its maintenance, supply of oxygen and laboratory materials

Tamil Nadu State AIDS Control Society (TNSACS)

Tamil Nadu was the first state in the country to set up an AIDS control Society way back in the year 1994 and set an example for other states to follow. Tamil Nadu State AIDS Control Society was constituted on 22.04.1994 to prevent, control the spread of HIV and provide care, support and treatment to the HIV infected / affected persons.

This society was registered under Tamil Nadu Societies Registration act, 1975 (Tamil Nadu Act 27 of 1975) on 4.5.1994. The Secretary to Government, Health & Family Welfare Department is the President of the Society and a senior IAS officer is the Member Secretary and Project Director of the Society.

TANSACS is fully funded by the National AIDS Control Organization (NACO) and works under the vision released by National AIDS Control Organization (NACO) through the National AIDS Control Program Phase V, towards ending AIDS as a public health threat by 2030.

TANSACS has successfully reduced the prevalence of HIV in the State recording 0.83 in 2003, 0.35 in 2008 to 0.18 in 2019 among antenatal mothers which is a proxy indicator for general population prevalence and this is possible only because of the tremendous support provided by both State and Central Governments.

The goal of National AIDS control Program (NACP) is to ensure 95% of the People living with HIV to know their status; 95% of the People Living with HIV to be linked to Anti-retroviral treatment; and 95 % of those who are on Anti-retroviral treatment to have viral suppression by 2025.

TANSACS has established facility integrated counselling and testing centres (FICTC) at all the Primary health centres (PHC) across the state and is providing the HIV screening kits regularly, with a focus to cover all the AN mothers and their spouse to get screened for HIV during their visit to PHC.

EVOLUTION AND REVOLUTION OF LABORATORY SERVICES - PUBLIC HEALTH

Laboratory services play an important role in the health system. Laboratory support in Primary Health Care level is very critical to achieve the important health indices.

Tamil Nadu has 2127 Primary Health Centres (PHC), all have a small, basic functional clinical laboratory to perform certain essential tests to support Communicable Diseases, Non-communicable Diseases (NCD) and Maternal and Child Health (MCH) care programs.

Microscopy Centres:

Two decades ago the PHCs had only a basic laboratory often called as Microscopic Centres with a Laboratory Assistant to diagnose malaria by blood smear examination and sputum for AFB.

Semi-auto analyzer in PHCs:

In 2004, Semi-auto analyzer was introduced in 385 Block PHCs in Tamil Nadu to perform basic blood investigations like Hb, Blood sugar, cholesterol, Creatinine etc., to identify high risk pregnancies and provide better health care services.

Creation of Laboratory Technician-Gr III Posts:

In 2007, the post of Laboratory Assistant was redesignated as Laboratory Technician (LT)-Grade III. The qualification for the post was redefined, and only a person with one-year CMLT qualification obtained from Govt. approved institutions were posted in the PHCs.

In 2018, a total of 700 LTs were recruited through Medical Services Recruitment (MRB) followed by 1500 in 2020 during the COVID-19 pandemic ensuring a minimum of One LT in a PHC to support the rural community. Integration of Laboratory works ensured among the Lab Technicians posted under ICTC, TB and IDSP programmes.

Development of Priority District Labs:

In order to support the disease surveillance activities, Priority District Labs were established in Cuddalore and Ramanathapuram on pilot basis to provide microbiology and serology capacity for the laboratory confirmation of epidemic prone communicable diseases. A qualified Microbiologist was also recruited on contractual basis.

Establishment of DPHL:

Based on the success of the 2 priority district labs, the Department of Public Health has established the District Public Health Laboratory (DPHL) network in Tamil Nadu in the remaining 30 Districts during 2012-13.

Tamil Nadu was the first state in the country to establish DPHL in all the 32 revenue districts. District Microbiologists were recruited on contractual basis and they were given the dual responsibility on laboratory investigations and laboratory management to support all the PHC labs.

The DPHL network in Tamil Nadu has won the Best Practices Award in 2016 under National Summits on Good, Replicable Practices & Innovations in Public Health Care Systems in India

Hematology Analyzer in PHCs:

Fully automated hematology analyser (Cell Counter) was introduced in 484 PHCs in Sep 2017 to manage the Dengue outbreak in Tamil Nadu. Provision of Cell Counter has helped the Medical Officer in a PHC to suspect a Dengue Fever with thrombocytopenia and immediate referral to higher centres to clinically manage the case. This timely referral has led to drastic reduction of dengue mortality in Tamil Nadu.

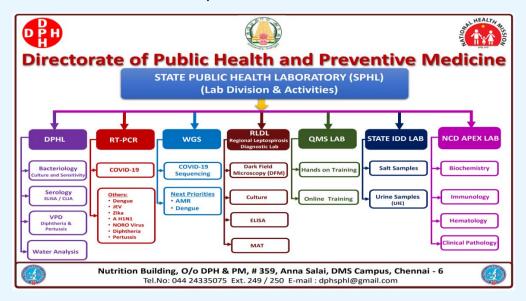
Establishment of Public Health Laboratory in the Directorate:



In order to strengthen the laboratory network in Public Health and also to provide advanced laboratory investigations for communicable and non-communicable diseases, a Public Health Laboratory was established in the Directorate of

Public Health.

It is an NABL Accredited Laboratory, which has the state-of-the-art RT-PCR Laboratory so far handled 28.82 lakhs COVID-19 samples and also has a sophisticated **Whole Genome Sequencing (WGS) Laboratory**, first of its kind in the country owned by the State, which was inaugurated by the Hon'ble Chief Minister of Tamil Nadu on 14th Sep 2021.



Key activities of the Public Health Lab are;

 Laboratory section handles strengthening of PHC labs and DPHL in terms of infrastructure, human resources, reagents and consumables, training, quality assurance and implementation of BMW.



- Referral laboratory functioning 24x7 for the DPHL and PHC labs.
- One of the high throughput labs in the State which can handle 10000 COVID-19 samples in a day.
- Capacity building of District Microbiologist and Lab. Technicians-Gr III
- Implement Quality Assurance (QA) Program for the DPHL and PHC Labs.
- Obtained NABL Certification for COVID-19 testing by RT-PCR Assay followed by 5 Primary Health Centres obtaining Medical(Entry Level)Testing Services approved by NABL.
- Conduct scientific survey to find out the disease burden in the community viz.,
 COVID-19 Serosurvey, Chronic Kidney Diseases (CKD) Survey and Elderly Panel Survey (EPS).
- Evaluation of diagnostic test kits for TNMSC Procurement.
- Provide laboratory support during epidemics and pandemics.
- Vaccine Preventable Diseases (VPD) Laboratory recognized by WHO for Diphtheria and Pertussis.
- Detection of SARS CoV-2 variants circulating in the community through WGS laboratory
- Hands on QMS Training for the Lab.Technicians posted in a PHC to ensure quality in service delivery.

- Implement CMC, Vellore-QA Program, and TN is the only state in the country in which, all the 2127 PHC labs are participating.
- Five rural PHC labs have recently been awarded.
- Plays a critical role under NIDDCP by effective functioning of State IDD Laboratory.
- Established a Regional Leptospirosis Reference Laboratory (RLD).
- State Apex NCD laboratory to support the disease control programs.

WHO Support in Tamil Nadu Public Health activities

WHO country office, New Delhi has been supporting, guiding and technically empowering Govt. of Tamil Nadu's Public Health Department under country cooperation plan on Health emergencies (Tsunami, Cyclone, Flood and Covid-19 Pandemic), control of Communicable diseases (vaccine preventable diseases like poliomyelitis, Measles, Rubella, Diphtheria, Pertussis, Neo-natal Tetanus, Tuberculosis, etc.,), Maternal & Child Health Services including Routine Immunization, Integrated Health Information Platform (IHIP) Surveillance and Capacity Building of Health System. WHO has been guiding the state to achieve Sustainable Developmental Goals (SDG) objectives and target in achieving Health for all by 2030.

Poliomyelitis Eradication

- WHO country office created National Polio Surveillance Project (NPSP) in September 1997.
- Three field offices headed by Public Health Qualified Surveillance Medical Officer (SMO) located in Chennai, Madurai and Pondicherry were established.
- Later in 1999, two additional SMO unit offices were created in Coimbatore and Tirunelveli with demarcated revenue districts.
- Regional Team Leader (RTL) located at Bangalore for providing technical support. SMOs and Sub-Regional Team Leader (SRTL) are located at Chennai.

- All SMOs along with district Public Health Officials (DDHS/CHO)
 established Surveillance network (Hospitals & informers) for syndromic
 Acute Flaccid Paralysis (AFP) Surveillance case reporting to detect polio
 transmission.
 - In addition to passive reporting, intensified Active Case search were made periodically in all Surveillance reporting hospitals to ensure reporting of all cases.
- Training, Orientation and sensitization workshops of all concerned in Medical Colleges, DMS Institutions, Major Private Hospitals, Public Health cadres including professional bodies like IMA, IAP, etc at various levels on significance of surveillance and reporting.
- All the reported AFP cases were investigated by DDHS/CHO/SMO/District Nodal Officers, tracking sample collection and shipment, monitoring public health response in the community, 60 day follow-up and facilitated final case classification of all AFP cases.
- All Polio high risk areas (migrants, inaccessible areas, hilly terrain, etc.,) and settled high risk population areas were mapped. Pulse Polio Immunization (PPI) campaign was initiated in 1995.
- Approximately 70 lakh under 5 year children are covered in every IPPI campaign.
- Indigenous poliomyelitis transmission in Tamil Nadu was interrupted in the year 1999 and subsequently Global certification committee certified South East Asian Region (SEAR) as Polio Free in March 2014.

Measles & Rubella Elimination:

Measles Surveillance:

 Measles Outbreak Surveillance was initiated in 2005 and sensitization workshops at State & District Level and to all Front-Line Health Workers were sensitized through cascaded training.

- District Epidemic Response Team was constituted, and SMOs were integral part of Epidemic Team.
- In 2017, MR campaign targeting children 9 months 15 years of age was conducted across the state.
- Case based suspected Measles Surveillance was constituted in 2019 and sensitization for all doctors and public health cadres was completed through cascaded training.
- In June 2021, syndromic Fever-Rash (FR) surveillance was initiated.
- All Fever cases with Rash in all age group are being screened to achieve goal of Measles & Rubella Elimination by December 2023.

Diphtheria / Pertussis / Neo-Natal Tetanus Surveillance:

- Laboratory supported Diphtheria, Pertussis and Neonatal Tetanus
 Surveillance was initiated in September 2019 at State level
- All SMOs are involved in case investigation and monitoring public health response.
- Reporting of suspected Diphtheria, Pertussis, Neonatal tetanus, Adverse Events following immunization (AEFI) are facilitated in both Government and Private Hospitals.

Routine Immunization:

- Routine Immunization session are monitored regularly in all districts with community monitoring for children vaccination coverage by SMOs regularly.
- Post Graduate Community Medicine department Medical students from Medical Colleges are involved in monitoring the RI programme implementation.
- SMOs are involved in RI handbook training of MO and para-medical staff in Regional Health & Family Welfare Training institutes regularly.
- Capacity building on RI for Medical officers at District level and various cadres at Block level.

AEFI

All SMOs are part of District AEFI committee and involved in case investigation of severe and serious AEFI cases reported.

COVID-19

- All SMOs were involved in assessment of Covid Care Centres (CCC) and Covid Health Centres (CHC).
- Covid-19 vaccination session sites were monitored and community monitoring were done by SMOs and through External Monitors
- 100 Oxygen concentrators, sanitizers and N95 mask were handed over to State government by WHO.

Health Emergencies

Tsunami: 2004

- WHO country office deployed SMOs and National Programme Officers
 (NPO) to assist in management of post Tsunami Special Officer was posted
 in Chennai for I year period for the above purpose.
- All SMOs and NPOs were involved in planning and assisting to conduct of Special Campaign of OPV, measles vaccine and Vitamin A to all children in Tsunami shelter homes.

Chennai Flood (2015):

All SMOs were deployed to Chennai to assist and support Measles Vaccination campaign for children below 15 years of age and support disease surveillance activities.

Cyclones:

During Vardah Cyclone (2016) and Gaja Cyclone (2018), SMOs assisted districts in disease surveillance to prevent and control potential outbreak of diseases, if any reported.

Role of WHO in TB Elimination

In the past 20 years since its inception in 1999, the WHO-NTEP Technical Support Network (WN-TSN) has sought to strengthen NTEP activities through technical support in planning, capacity building, training, evidence generation, surveillance and monitoring and evaluation.

TAMIL NADU STATE HEALTH TRANSPORT DEPARTMENT ROLE IN DPH VEHICLE MOVEMENT

Tamil Nadu State Health Transport Department is responsible for the upkeep and maintenance of all the vehicles attached to various Directorates of Health and Family Welfare Department. Six Mobile maintenance units were initially established by the Government in the year 1959 exclusively for the maintenance of Health Department vehicles including DPH vehicles. An unique feature of this Department is the functioning of 29 Mobile Workshops which are positioned all over the state. These Workshops are provided with vehicles to render periodical service once in two months and execute minor repairs at the door steps of Vehicle using Officer. Timely replacement of lubricants and worn out items by these Mobile Workshops ensures hassle free operation of vehicles.

DPH HUMAN RESOURCES AND MEDICAL SERVICES RECRUITMENT BOARD

Medical Services Recruitment Board (MRB) was formed in January, 2012 with an aim to carry out all direct recruitments in order to fill up vacancies in a speedy transparent manner to various categories of posts including Medical, para medical and Non-Medical Staff in the Health and Family Welfare Department to ensure timely provision of health care services to the public. The Medical Services Recruitment Board commenced functioning from 06.02.2012.

Universal Health Coverage (Comprehensive Primary Health Care Services)



Health is a universal right and the national health policies have been emphasizing the importance of providing Comprehensive Primary Health Care at the entry point itself whereby a full spectrum of essential facts of health needs to be covered including quality, health promotion, prevention and treatment, rehabilitation and palliative care. Subsequent to the UN landmark resolution of endorsing UHC in December 2012, the World Bank Group and the World Health Organization (WHO) have identified UHC as a top priority goal for sustainable development. Universal Health Coverage Day is being commemorated on 12th of every December. UHC aims to bring comprehensive set of services at the door step of the people thereby reducing out-of-pocket expenditure. UHC also aims to address the healthcare needs of the people in the long-term. The full spectrum of essential, quality health services should be covered including health promotion, prevention and treatment, rehabilitation and palliative care.

The Government have accorded permission to engage 4,848 MLHPs and 2,448 MPHW (Male) / Health Inspector Grade-II on contract basis. These HWCs(HWC PHCs/ HWC HSCs) are providing a set of 12 Comprehensive set of services including Preventive Promotive, curative Rehabilitative and Palliative care services related to RMNCH+A, Communicable diseases, Non-Communicable Diseases, Ophthalmology, ENT, Dental, Mental, Geriatric care, treatment for acute simple medical conditions and emergency and trauma services

15th Finance Commission - Health Grants:

Considering the limitation of Health infra structure in the Country put forth by the COVID-19 pandemic, the 15thFinance Commission has recommended sector specific grants for health sector primarily for addressing the gaps in Primary Health Care.

The Finance Commission has recommended for channelizing the grants for Health through Local Government as it has felt that the Urban and Rural bodies could play a catalytic role in ensuring health service delivery. In addition to the above, the FC-XV, has recommended the formation of a State Level Committee which would be headed by the Chief Secretary of the State Government and a District Level Committee headed by the District Collector.

The following Rural and Urban Components could be strengthened in the grants allotted through XV Finance Commission.

- ✓ Building-less (a) Community Health Centres (CHCs), (b) Primary Health Centres (PHCs) and (c) Sub Health Centres (SHCs).
- ✓ Block Level Public Health Units.
- ✓ Support for diagnostic infrastructure to the primary health care facilities such as PHCsand HSCs
- ✓ Conversion of (a) rural PHCs and (b) Sub-Centres to HWCs.
- ✓ Support for diagnostic infrastructure to the primary health care facilities Urban PHCs
- ✓ Grants for Urban Health and Wellness Centres
- ✓ Grants for Urban Health and Wellness Centres Poly Clinic.

PM Ayushman Bharat Health Infrastructure Mission support in DPH infrastructure:

PM Ayushman Bharat Health Infrastructure Mission was launched by Union Government in October2021. It is the largest Pan-India scheme for creation and improvement of long-term Public Healthcare Infrastructure over a period of next 5 years from FY2021-22 till FY 2025-26. It supports the DPH infrastructure as detailed below:

- Ayushman Bharat–Health and Wellness Centres (AB-HWCs) in Urban Areas
- District Integrated Public Health Laboratories

ROLE OF DPH IN COVID-19 PANDEMIC MANAGEMENT

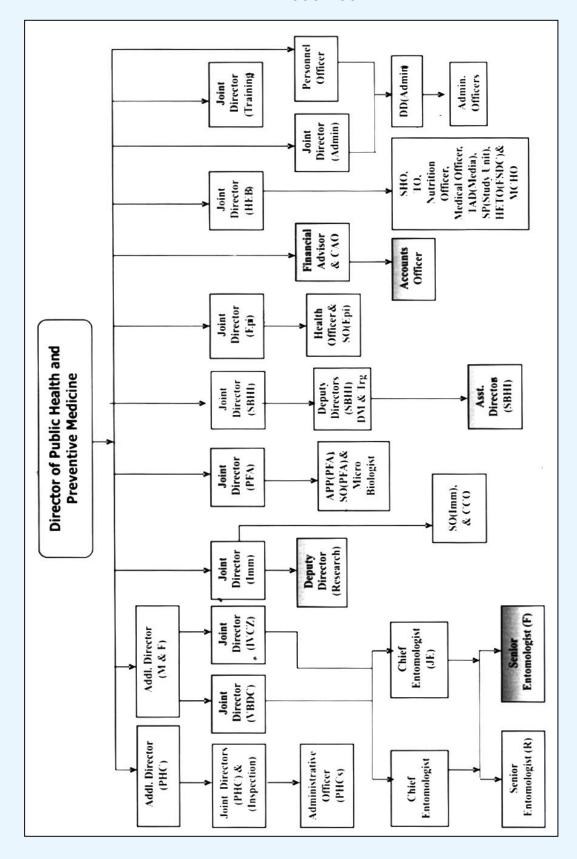
On 15.03.2020, the Government declared that there is a threat of outbreak of COVID-19 in the State of Tamil Nadu under the Tamil Nadu Public Health Act, 1939. The Government notified the Tamil Nadu COVID-19 Regulations, 2020 under the Epidemic Diseases Act, 1897 on 15.03.2020 to prevent the outbreak of COVID-19.

In addition to the basic five pronged strategy of Testing, Tracing, Treatment, Vaccination and Follow up of COVID appropriate Behaviour, the following activities were undertaken to achieve the systematic reduction by the DPH:

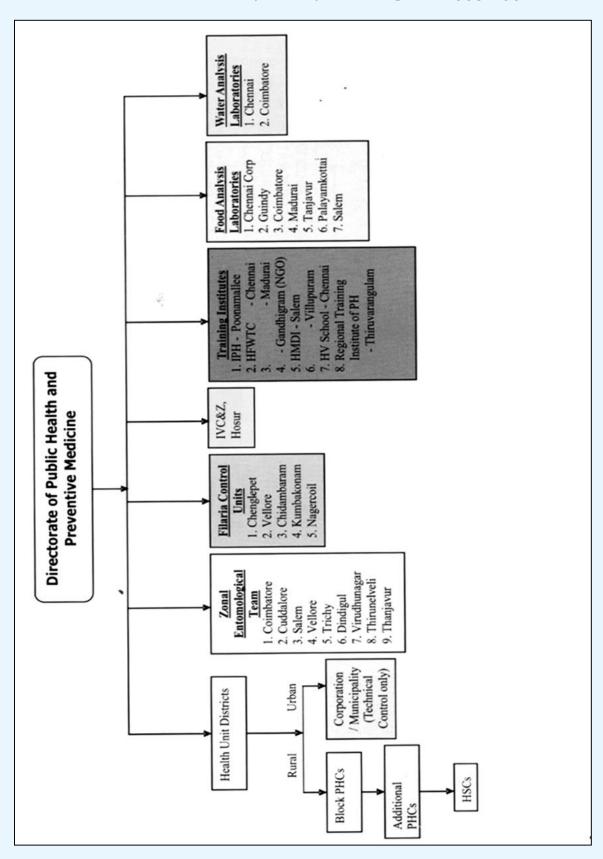
- Dedicated work of the Doctors, Nurses, other Paramedical staff, Police, Conservancy staff, combined effort of all related Government Departments Effective contact tracing, strict containment management and clear-cut strategies from the beginning by focusing on aggressive testing, quarantine, effective patient management.
- Aggressive, targeted RT-PCR testing
- Intensive Door to Door survey for identification of persons with influenza like illness all over the State
- Conduct of fever camps daily including Field Fever Camps
- Extensive IEC activities for COVID Appropriate Behaviour through Campaign in the State
- Continuous review and visits to all the districts.
- Establishment of Interim COVID Care Centres
- Recruitment of additional health personnel to augment the services
- Provision of oxygen Concentrators to manage high risk cases.

Present thrust is on vaccination and localised containment and active surveillance followed by test, trace, treat, vaccinate and encourage and enforce follow-up of COVID-19 appropriate behaviour which has resulted in gradual reduction of cases throughout the State and COVID-19 is under control and is being closely monitored.

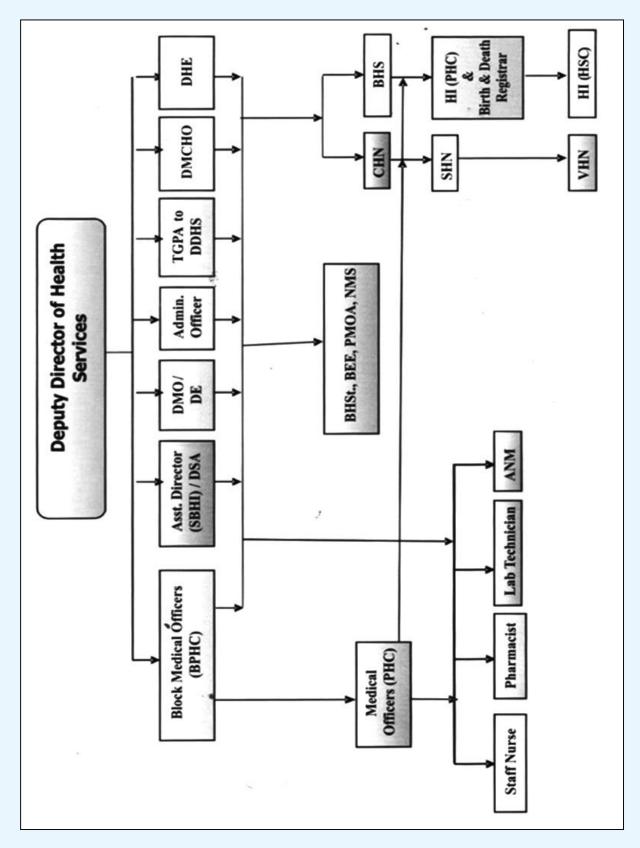
ORGANISATION STRUCTURE OF DPH HEAD QUARTERS 2008-2009



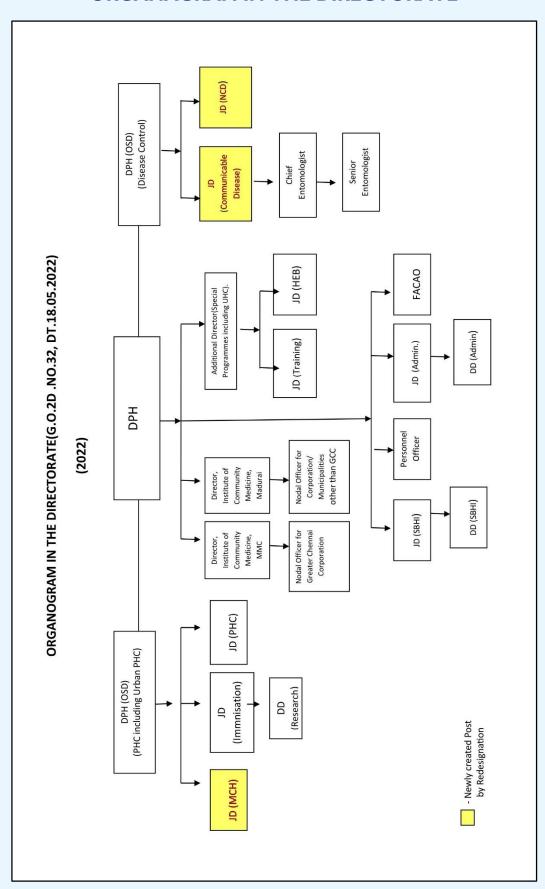
ORGANISATION STRUCTURE OF DEPARTMENT OF PUBLIC HEALTH AND PREVENTIVE MEDICINE 2008-2009



ORGANISATION STRUCTURE OF DDHS 2008-2009



ORGANAGRAM IN THE DIRECTORATE



SUSTAINABLE DEVELOPMENT GOAL: 3- ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

By 2030, Nation shall ensure universal access to high quality, effective and affordable healthcare to all, minimizing incidence and mortality from communicable, non-communicable and lifestyle diseases

As per the Sustainable Development Goals India Index 2020-21 — Report prepared by the NITI Aayog, Tamil Nadu has been ranked second with a score of 74 and obtained the third position with a score of 81 in the Goal 3.

SDG Goals

- 3.1: Reduce maternal mortality
- 3.2: End all preventable deaths under five years of age
- 3.3: Fight communicable diseases
- 3.4: Reduce mortality from non-communicable diseases and promote mental health
- 3.5: Prevent and treat substance abuse
- 3.6: Reduce road injuries and deaths
- 3.7: Universal access to sexual and reproductive care, family planning and education
- 3.8: Achieve universal health coverage
- 3.9: Reduce illnesses and deaths from hazardous chemicals and pollution
- 3.10: Implement the WHO framework convention on tobacco control
- 3.11: Support research, development and universal access to affordable vaccines and medicines
- 3.12: Increase health financing and support health workforce in developing countries
- 3.13: Improve early warning systems for global health risks



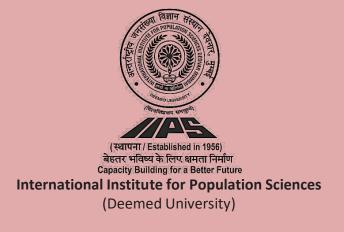
Ministry of Health and Family Welfare

NATIONAL FAMILY HEALTH SURVEY - 5

2020-21

STATE FACT SHEET

TAMIL NADU



Indicators	Tallill Nauu - Ney Illuicators		NEUO 6		NEUO 4
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14. Women who are literate ⁴ (%) 88.9 79.6 84.0 na 15. Men who are literate ⁴ (%) 92.0 89.6 90.7 na 16. Women with 10 or more years of schooling (%) 63.7 49.9 56.6 50.9 17. Men with 10 or more years of schooling (%) 64.4 54.3 59.1 58.3 18. Women who have ever used the internet (%) 55.8 39.2 46.9 na 19. Men who have ever used the internet (%) 76.1 64.9 70.2 na Marriage and Fertility 20. Women age 20-24 years married before age 18 years (%) 10.4 15.2 12.8 16.3 21. Men age 25-29 years married before age 21 years (%) 6.0 3.3 4.5 9.0 22. Total fertility rate (children per woman) 16.6 1.9 1.8 1.7 23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 4.2 8.2 6.3 5.0 24. Adolescent fertility rate for women age 15-19 years ⁵ 23 44 34 39 Infant and Child Mortality Rates (per 1,000 live births) 25. Neonatal mortality rate (NNMR) 8.5 16.1 12.7 14.0 26. Infant mortality rate (IMR) 14.9 21.7 18.6 20.2 27. Under-five mortality rate (USMR) 17.3 26.4 22.3 26.8 Current Use of Family Planning Methods (currently married women age 15-49 years) 28. Any method ⁶ (%) 6.0 6.8 65.5 52.6 30. Female sterilization (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 4.0 0.1 0.1 0.1 31. Male sterilization (%) 4.0 0.3 0.3 0.2 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15-49 years)		31.4	19.9	25.2	na
15. Men who are literate ⁴ (%) 16. Women with 10 or more years of schooling (%) 17. Men with 10 or more years of schooling (%) 18. Women who have ever used the internet (%) 19. Men who have ever used the internet (%) 19. Men who have ever used the internet (%) 19. Men who have ever used the internet (%) 19. Men who have ever used the internet (%) 19. Men who have ever used the internet (%) 19. Men who have ever used the internet (%) 19. Men who have ever used the internet (%) 19. Men age 20-24 years married before age 18 years (%) 21. Men age 20-24 years married before age 21 years (%) 22. Total fertility rate (children per woman) 23. Women age 25-29 years married before age 21 years (%) 24. Adolescent fertility rate (children per woman) 25. Neonage 15-19 years who were already mothers or pregnant at the time of the survey (%) 26. Infant and Child Mortality Rates (per 1,000 live births) 27. Under-five mortality rate (IMR) 28. Diffant mortality rate (IMR) 29. Any modern method ⁶ (%) 29. Any modern method ⁶ (%) 29. Any modern method ⁶ (%) 30. Female sterilization (%) 31. Male sterilization (%) 32. IUD/PPIUD (%) 33. Pill (%) 34. Condom (%) 35. Injectables (%) 36. Injectables (%) 36. Injectables (%) 37. Under-five mortality Planning (currently married women age 15-49 years) Unmet Need for Family Planning (currently married women age 15-49 years)					
16. Women with 10 or more years of schooling (%) 63.7 49.9 56.6 50.9 17. Men with 10 or more years of schooling (%) 64.4 54.3 59.1 58.3 18. Women who have ever used the internet (%) 76.1 64.9 70.2 na 19. Men who have ever used the internet (%) 76.1 64.9 70.2 na Marriage and Fertility 20. Women age 20-24 years married before age 18 years (%) 10.4 15.2 12.8 16.3 21. Men age 25-29 years married before age 21 years (%) 6.0 3.3 4.5 9.0 22. Total fertility rate (children per woman) 1.6 1.9 1.8 1.7 23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 4.2 8.2 6.3 5.0 24. Adolescent fertility rate (children per woman) 1.6 1.9 1.8 1.7 23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 4.2 8.2 6.3 5.0 24. Adolescent fertility rate (IMR) 1.6 1.9 1.8 1.7 1.4 3.9 25. Neonatal mortality rate (IMR) 1.5		88.9	79.6	84.0	na
17. Men with 10 or more years of schooling (%) 64.4 54.3 59.1 58.3 18. Women who have ever used the internet (%) 55.8 39.2 46.9 na 19. Men who have ever used the internet (%) 76.1 64.9 70.2 na Marriage and Fertility 20. Women age 20-24 years married before age 18 years (%) 10.4 15.2 12.8 16.3 21. Men age 25-29 years married before age 21 years (%) 6.0 3.3 4.5 9.0 22. Total fertility rate (children per woman) 1.6 1.9 1.8 1.7 23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 4.2 8.2 6.3 5.0 24. Adolescent fertility rate for women age 15-19 years 5 23 44 34 39 11. Minant and Child Mortality Rates (per 1,000 live births) 25. Neonatal mortality rate (IMR) 8.5 16.1 12.7 14.0 26. Infant mortality rate (IMR) 14.9 21.7 18.6 20.2 27. Under-five mortality rate (U5MR) 17.3 26.4 22.3 26.8	15. Men who are literate ⁴ (%)				na
18. Women who have ever used the internet (%) 55.8 39.2 46.9 na 19. Men who have ever used the internet (%) 76.1 64.9 70.2 na Marriage and Fertility 20. Women age 20-24 years married before age 18 years (%) 10.4 15.2 12.8 16.3 21. Men age 25-29 years married before age 21 years (%) 6.0 3.3 4.5 9.0 22. Total fertility rate (children per woman) 1.6 1.9 1.8 1.7 23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 4.2 8.2 6.3 5.0 24. Adolescent fertility rate for women age 15-19 years 5 23 44 34 39 Infant and Child Mortality Rates (per 1,000 live births) 25. Neonatal mortality rate (IMR) 8.5 16.1 12.7 14.0 26. Infant mortality rate (USMR) 14.9 21.7 18.6 20.2 27. Under-five mortality rate (USMR) 67.6 69.5 68.6 53.2 28. Any method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 67.6 69.5 68.	16. Women with 10 or more years of schooling (%)	63.7	49.9	56.6	50.9
19. Men who have ever used the internet (%) Marriage and Fertility 20. Women age 20-24 years married before age 18 years (%) 21. Men age 25-29 years married before age 21 years (%) 22. Total fertility rate (children per woman) 23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 24. Adolescent fertility rate for women age 15-19 years for pregnant at the time of the survey (%) 25. Neonatal mortality Rates (per 1,000 live births) 26. Infant mortality rate (IMR) 27. Under-five mortality rate (U5MR) Current Use of Family Planning Methods (currently married women age 15-49 years) 29. Any modern method (%) 30. Female sterilization (%) 31. Male sterilization (%) 32. IUD/PPIUD (%) 33. Pill (%) 34. Condom (%) 35. Injectables (%) Unmet Need for Family Planning (currently married women age 15-49 years) Unmet Need for Family Planning (currently married women age 15-49 years)	17. Men with 10 or more years of schooling (%)	64.4	54.3	59.1	58.3
Marriage and Fertility 20. Women age 20-24 years married before age 18 years (%) 10.4 15.2 12.8 16.3 21. Men age 25-29 years married before age 21 years (%) 6.0 3.3 4.5 9.0 22. Total fertility rate (children per woman) 1.6 1.9 1.8 1.7 23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 4.2 8.2 6.3 5.0 24. Adolescent fertility rate for women age 15-19 years 23 44 34 39 1 39 1 39 1 39 1 30 39 1 30 30 30 30 30 30 30	18. Women who have ever used the internet (%)	55.8	39.2	46.9	na
20. Women age 20-24 years married before age 18 years (%) 10.4 15.2 12.8 16.3 21. Men age 25-29 years married before age 21 years (%) 6.0 3.3 4.5 9.0 22. Total fertility rate (children per woman) 1.6 1.9 1.8 1.7 23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 4.2 8.2 6.3 5.0 24. Adolescent fertility rate for women age 15-19 years ⁵ 23 44 34 39 Infant and Child Mortality Rates (per 1,000 live births) 25. Neonatal mortality rate (INMR) 8.5 16.1 12.7 14.0 26. Infant mortality rate (IMR) 14.9 21.7 18.6 20.2 27. Under-five mortality rate (USMR) 17.3 26.4 22.3 26.8 Current Use of Family Planning Methods (currently married women age 15-49 years) 28. Any method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 55.6 59.9 57.8 49.4 32. IUD/PPIUD (%) 4.8	19. Men who have ever used the internet (%)	76.1	64.9	70.2	na
21. Men age 25-29 years married before age 21 years (%) 6.0 3.3 4.5 9.0 22. Total fertility rate (children per woman) 1.6 1.9 1.8 1.7 23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 4.2 8.2 6.3 5.0 24. Adolescent fertility rate for women age 15-19 years ⁵ 23 44 34 39 Infant and Child Mortality Rates (per 1,000 live births) 25. Neonatal mortality rate (NNMR) 8.5 16.1 12.7 14.0 26. Infant mortality rate (UMR) 14.9 21.7 18.6 20.2 27. Under-five mortality rate (USMR) 17.3 26.4 22.3 26.8 Current Use of Family Planning Methods (currently married women age 15–49 years) 28. Any method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1	Marriage and Fertility				
22. Total fertility rate (children per woman) 1.6 1.9 1.8 1.7 23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 4.2 8.2 6.3 5.0 24. Adolescent fertility rate for women age 15-19 years ⁵ 23 44 34 39 Infant and Child Mortality Rates (per 1,000 live births) 25. Neonatal mortality rate (NNMR) 8.5 16.1 12.7 14.0 26. Infant mortality rate (IMR) 14.9 21.7 18.6 20.2 27. Under-five mortality rate (U5MR) 17.3 26.4 22.3 26.8 Current Use of Family Planning Methods (currently married women age 15–49 years) 28. Any modern method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 67.6 69.5 55.6 59.9 57.8 49.4 31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 </td <td>20. Women age 20-24 years married before age 18 years (%)</td> <td>10.4</td> <td>15.2</td> <td>12.8</td> <td>16.3</td>	20. Women age 20-24 years married before age 18 years (%)	10.4	15.2	12.8	16.3
23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%) 24. Adolescent fertility rate for women age 15-19 years 5 25. Neonatal mortality Rates (per 1,000 live births) 25. Neonatal mortality rate (INNMR) 26. Infant mortality rate (IMR) 27. Under-five mortality rate (U5MR) 28. Any method 6 (%) 29. Any modern method 6 (%) 30. Female sterilization (%) 31. Male sterilization (%) 32. IUD/PPIUD (%) 33. Pill (%) 35. Injectables (%) Unmet Need for Family Planning (currently married women age 15-49 years) Evaluation (and the survey (%) 4.2 8.2 6.3 5.0 5.0 4.2 4.2 3.2 4.4 34 39 Injectables (%) 4.5 16.1 12.7 14.0 4.6 20.2 4.7 18.6 20.2 4.8 20.2 4.8 20.3 26.8 4.8 4.7 4.8 1.9 4.9 31. Male sterilization (%) 4.8 4.7 4.8 1.9 4.9 33. Pill (%) 4.9 30. Pill (%) 4.9 4.7 4.8 1.9 4.9 4.8 4.7 4.8 1.9 4.9 5.0 5.0 5.0 5.0 4.0 5.0 5.0 5.0 4.0 5.0 5.0 5.0 4.0 5.0 5.0 5.0 4.0 5.0 5.0 5.0 5.0 5.0 5	21. Men age 25-29 years married before age 21 years (%)	6.0	3.3	4.5	9.0
24. Adolescent fertility rate for women age 15-19 years 5 23 44 34 39 Infant and Child Mortality Rates (per 1,000 live births) 25. Neonatal mortality rate (NNMR) 8.5 16.1 12.7 14.0 26. Infant mortality rate (IMR) 14.9 21.7 18.6 20.2 27. Under-five mortality rate (U5MR) 17.3 26.4 22.3 26.8 Current Use of Family Planning Methods (currently married women age 15-49 years) 28. Any method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 64.0 66.8 65.5 52.6 30. Female sterilization (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmethod (for Family Planning (currentl	22. Total fertility rate (children per woman)	1.6	1.9	1.8	1.7
Section Sect	23. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%)	4.2	8.2	6.3	5.0
25. Neonatal mortality rate (NNMR) 8.5 16.1 12.7 14.0 26. Infant mortality rate (IMR) 14.9 21.7 18.6 20.2 27. Under-five mortality rate (U5MR) 17.3 26.4 22.3 26.8 Current Use of Family Planning Methods (currently married women age 15–49 years) 28. Any method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 64.0 66.8 65.5 52.6 30. Female sterilization (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	24. Adolescent fertility rate for women age 15-19 years ⁵	23	44	34	39
26. Infant mortality rate (IMR) 14.9 21.7 18.6 20.2 27. Under-five mortality rate (U5MR) 17.3 26.4 22.3 26.8 Current Use of Family Planning Methods (currently married women age 15–49 years) 28. Any method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 64.0 66.8 65.5 52.6 30. Female sterilization (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	Infant and Child Mortality Rates (per 1,000 live births)				
27. Under-five mortality rate (U5MR) 17.3 26.4 22.3 26.8 Current Use of Family Planning Methods (currently married women age 15–49 years) 28. Any method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 64.0 66.8 65.5 52.6 30. Female sterilization (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	25. Neonatal mortality rate (NNMR)	8.5	16.1	12.7	14.0
Current Use of Family Planning Methods (currently married women age 15–49 years) 28. Any method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 64.0 66.8 65.5 52.6 30. Female sterilization (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	26. Infant mortality rate (IMR)	14.9	21.7	18.6	20.2
28. Any method ⁶ (%) 67.6 69.5 68.6 53.2 29. Any modern method ⁶ (%) 64.0 66.8 65.5 52.6 30. Female sterilization (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	27. Under-five mortality rate (U5MR)	17.3	26.4	22.3	26.8
29. Any modern method ⁶ (%) 64.0 66.8 65.5 52.6 30. Female sterilization (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	Current Use of Family Planning Methods (currently married women age 15–49 years)				
30. Female sterilization (%) 55.6 59.9 57.8 49.4 31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	28. Any method ⁶ (%)	67.6	69.5	68.6	53.2
31. Male sterilization (%) 0.1 0.1 0.1 0.0 32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	29. Any modern method ⁶ (%)	64.0	66.8	65.5	52.6
32. IUD/PPIUD (%) 4.8 4.7 4.8 1.9 33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	30. Female sterilization (%)	55.6	59.9	57.8	49.4
33. Pill (%) 0.4 0.3 0.3 0.2 34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	31. Male sterilization (%)	0.1	0.1	0.1	0.0
34. Condom (%) 2.6 1.2 1.8 0.8 35. Injectables (%) 0.1 0.3 0.2 0.1 Unmet Need for Family Planning (currently married women age 15–49 years)	32. IUD/PPIUD (%)	4.8	4.7	4.8	1.9
35. Injectables (%) Unmet Need for Family Planning (currently married women age 15–49 years) 0.1 0.2 0.1	33. Pill (%)	0.4	0.3	0.3	0.2
Unmet Need for Family Planning (currently married women age 15–49 years)	34. Condom (%)	2.6	1.2	1.8	0.8
		0.1	0.3	0.2	0.1
00 T / I / 17 /0/	Unmet Need for Family Planning (currently married women age 15–49 years)				
	36. Total unmet need ⁷ (%)	8.1	6.9	7.5	10.1
37. Unmet need for spacing ⁷ (%) 3.3 2.8 3.0 4.8		3.3	2.8	3.0	4.8
Quality of Family Planning Services	Quality of Family Planning Services				
38. Health worker ever talked to female non-users about family planning (%) 27.4 29.5 28.5 30.2	38. Health worker ever talked to female non-users about family planning (%)	27.4	29.5	28.5	30.2
39. Current users ever told about side effects of current method ⁸ (%) 83.0 82.3 82.6 76.6	39. Current users ever told about side effects of current method ⁸ (%)	83.0	82.3	82.6	76.6

Note: Major indicators are highlighted in grey.

LHV = Lady health visitor; ANM = Auxiliary nurse midwife; na = Not available

() Based on 25-49 unweighted cases

· Pregnant with a mistimed pregnancy.

· Pregnant with an unwanted pregnancy.

^{*} Percentage not shown; based on fewer than 25 unweighted cases

Pipped water into dwelling/yard/plot, piped to neighbour, public tap/standpipe, tube well or borehole, protected dug well, protected spring, rainwater, tanker truck, cart with small tank, bottled water, community RO plant.

²Flush to piped sewer system, flush to septic tank, flush to pit latrine, flush to don't know where, ventilated improved pit (VIP)/biogas latrine, pit latrine with slab, twin pit/composting toilet, which is not shared with any other household. This indicator does not denote access to toilet facility. ³Electricity, LPG/natural gas, biogas.

⁴Refers to women/men who completed standard 9 or higher and women/men who can read a whole sentence or part of a sentence.

Equivalent to the age-specific fertility rate for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19.

Any method includes other methods that are not shown separately; Any modern method includes other modern methods that are not shown separately.

Tunmet need for family planning refers to fecund women who are not using contraception but who wish to postpone the next birth (spacing) or stop childbearing

altogether (limiting). Specifically, women are considered to have unmet need for spacing if they are:

At risk of becoming pregnant, not using contraception, and either do not want to become pregnant within the next two years, or are unsure if or when they want to become pregnant.

Postpartum amenorrhoeic for up to two years following a mistimed birth and not using contraception.
 Women are considered to have unmet need for limiting if they are:
 At risk of becoming pregnant, not using contraception, and want no (more) children.

Postpartum amenorrhoeic for up to two years following an unwanted birth and not using contraception.

Women who are classified as infecund have no unmet need because they are not at risk of becoming pregnant. Unmet need for family planning is the sum of unmet need for spacing plus unmet need for limiting.

Based on current users of female sterilization, IUD/PPIUD, injectables, and pills who started using that method in the past 5 years.

Tamii Nadu - Key indicators		NELIO		NEUO 4
	NFHS-5			NFHS-4
Indicators		(2020-21)		(2015-16)
Maternal and Child Health	Urban	Rural	Total	Total
Maternity Care (for last birth in the 5 years before the survey)				
40. Mothers who had an antenatal check-up in the first trimester (%)	76.7	78.0	77.4	64.0
41. Mothers who had at least 4 antenatal care visits (%)	88.8	90.8	89.9	81.1
42. Mothers whose last birth was protected against neonatal tetanus ⁹ (%)	89.5	89.9	89.7	71.0
43. Mothers who consumed iron folic acid for 100 days or more when they were pregnant (%)	84.2	81.0	82.5	64.0
44. Mothers who consumed iron folic acid for 180 days or more when they were pregnant (%)	66.4	60.3	63.1	40.1
45. Registered pregnancies for which the mother received a Mother and Child Protection (MCP) card (%)	98.1	99.4	98.8	96.0
46. Mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (%)	92.5	93.7	93.2	74.0
47. Average out-of-pocket expenditure per delivery in a public health facility (Rs.)	3,647	3,097	3,316	2,609
48. Children born at home who were taken to a health facility for a check-up within 24 hours of birth (%)	*	*	*	(11.3)
49. Children who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (%)	95.1	94.8	94.9	na
Delivery Care (for births in the 5 years before the survey)				
50. Institutional births (%)	99.8	99.4	99.6	98.9
51. Institutional births in public facility (%)	58.0	74.0	66.9	66.7
52. Home births that were conducted by skilled health personnel ¹⁰ (%)	0.2	0.3	0.2	0.6
53. Births attended by skilled health personnel ¹⁰ (%)	100.0	99.7	99.8	99.2
54. Births delivered by caesarean section (%)	47.5	42.9	44.9	34.1
55. Births in a private health facility that were delivered by caesarean section (%)	61.5	66.7	63.8	51.3
56. Births in a public health facility that were delivered by caesarean section (%)	37.5	35.1	36.0	26.3
Child Vaccinations and Vitamin A Supplementation				
57. Children age 12-23 months fully vaccinated based on information from either vaccination card or mother's recall ¹¹ (%)	86.4	91.7	89.2	69.7
58. Children age 12-23 months fully vaccinated based on information from vaccination card only ¹² (%)	89.4	91.3	90.4	76.1
59. Children age 12-23 months who have received BCG (%)	96.9	98.2	97.6	94.9
60. Children age 12-23 months who have received 3 doses of polio vaccine ¹³ (%)	89.9	92.9	91.5	82.3
61. Children age 12-23 months who have received 3 doses of penta or DPT vaccine (%)	93.0	96.3	94.8	84.5
62. Children age 12-23 months who have received the first dose of measles-containing vaccine (MCV) (%)	94.7	96.8	95.8	85.1
63. Children age 24-35 months who have received a second dose of measles-containing vaccine (MCV) (%)	40.9	48.0	44.7	na
64. Children age 12-23 months who have received 3 doses of rotavirus vaccine ¹⁴ (%)	65.8	67.0	66.4	na
65. Children age 12-23 months who have received 3 doses of penta or hepatitis B vaccine (%)	90.4	94.1	92.3	68.2
66. Children age 9-35 months who received a vitamin A dose in the last 6 months (%)	68.3	68.0	68.2	73.0
67. Children age 12-23 months who received most of their vaccinations in a public health facility (%)	83.1	95.6	89.8	86.1
68. Children age 12-23 months who received most of their vaccinations in a private health facility (%)	16.9	4.2	10.1	14.0
Treatment of Childhood Diseases (children under age 5 years)				
69. Prevalence of diarrhoea in the 2 weeks preceding the survey (%)	3.6	3.8	3.7	8.0
70. Children with diarrhoea in the 2 weeks preceding the survey who received oral rehydration salts (ORS) (%)	51.0	55.9	53.8	61.8
71. Children with diarrhoea in the 2 weeks preceding the survey who received zinc (%)	26.9	30.4	28.9	41.3
72. Children with diarrhoea in the 2 weeks preceding the survey taken to a health facility or health provider (%)	62.0	58.9	60.2	73.2
73. Prevalence of symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey (%)	1.4	0.9	1.1	2.8
74. Children with fever or symptoms of ARI in the 2 weeks preceding the survey taken to a health facility or health provider (%)	68.0	67.0	67.4	82.2
glncludes mothers with two injections during the pregnancy for their last birth, or two or more injections (the last within 3	oore of the	loot live hi	rth) or thro	o or more

9Includes mothers with two injections during the pregnancy for their last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the

last birth.

10Doctor/nurse/LHV/ANW/midwife/other health personnel.

11Vaccinated with BCG, measles-containing vaccine (MCV)/MR/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta

¹²Among children whose vaccination card was shown to the interviewer, percentage vaccinated with BCG, measles-containing vaccine (MCV)/MR/MMR/Measles, and 3 doses each of polio (excluding polio vaccine given at birth) and DPT or penta vaccine.

¹³Not including polio vaccination given at birth.

¹⁴Since rotavirus is not being provided across all states and districts, the levels should not be compared.

Tamii Nadu - Key Indicators		NEUC E		NEUC 4
Indicators	NFHS-5			NFHS-4
Indicators		2020-21		(2015-16)
Child Feeding Practices and Nutritional Status of Children	Urban	Rural	Total	Total
75. Children under age 3 years breastfed within one hour of birth ¹⁵ (%)	60.0	60.4	60.2	54.7
76. Children under age 6 months exclusively breastfed ¹⁶ (%)	45.5	61.9	55.1	48.3
77. Children age 6-8 months receiving solid or semi-solid food and breastmilk ¹⁶ (%)	70.2	64.0	66.5	67.5
78. Breastfeeding children age 6-23 months receiving an adequate diet ^{16,17} (%)	14.9	11.2	12.8	21.4
79. Non-breastfeeding children age 6-23 months receiving an adequate diet ^{16, 17} (%)	23.5	24.6	24.1	47.1
80. Total children age 6-23 months receiving an adequate diet ^{16,17} (%)	17.9	15.0	16.3	30.7
81. Children under 5 years who are stunted (height-for-age) ¹⁸ (%)	22.2	27.2	25.0	27.1
82. Children under 5 years who are wasted (weight-for-height) ¹⁸ (%)	13.9	15.2	14.6	19.7
83. Children under 5 years who are severely wasted (weight-for-height) ¹⁹ (%)	5.3	5.6	5.5	7.9
84. Children under 5 years who are underweight (weight-for-age) ¹⁸ (%)	20.0	23.5	22.0	23.8
85. Children under 5 years who are overweight (weight-for-height) ²⁰ (%)	5.1	3.7	4.3	5.0
Nutritional Status of Adults (age 15-49 years)	0.7	45.0	40.0	440
86. Women whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m ²) ²¹ (%)	9.7	15.2	12.6	14.6
87. Men whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m²) (%)	11.3	12.8	12.1	12.4
88. Women who are overweight or obese (BMI ≥25.0 kg/m²)²¹ (%)	46.1	35.4	40.4	30.9
89. Men who are overweight or obese (BMI ≥25.0 kg/m²) (%)	43.1	31.6	37.0	28.2
90. Women who have high risk waist-to-hip ratio (≥0.85) (%)	58.3	53.8	55.9	na
91. Men who have high risk waist-to-hip ratio (≥0.90) (%)	55.6	56.8	56.2	na
Anaemia among Children and Adults				
92. Children age 6-59 months who are anaemic (<11.0 g/dl) ²² (%)	53.7	60.4	57.4	50.7
93. Non-pregnant women age 15-49 years who are anaemic (<12.0 g/dl) ²² (%)	51.5	55.4	53.6	55.4
94. Pregnant women age 15-49 years who are anaemic (<11.0 g/dl) ²² (%)	42.6	53.1	48.3	44.4
95. All women age 15-49 years who are anaemic ²² (%)	51.3	55.3	53.4	55.0
96. All women age 15-19 years who are anaemic ²² (%)	50.6	54.9	52.9	54.2
97. Men age 15-49 years who are anaemic (<13.0 g/dl) ²² (%)	15.0	15.5	15.2	20.4
98. Men age 15-19 years who are anaemic (<13.0 g/dl) ²² (%)	24.3	24.9	24.6	26.0
Blood Sugar Level among Adults (age 15 years and above)				
Women				
99. Blood sugar level - high (141-160 mg/dl) ²³ (%)	8.2	6.9	7.5	na
100. Blood sugar level - very high (>160 mg/dl) ²³ (%)	13.2	9.4	11.1	na
101. Blood sugar level - high or very high (>140 mg/dl) or taking medicine to control blood sugar level ²³ (%)	23.8	18.0	20.7	na
Men				
102. Blood sugar level - high (141-160 mg/dl) ²³ (%)	8.7	7.6	8.1	na
103. Blood sugar level - very high (>160 mg/dl) ²³ (%)	12.7	11.2	11.9	na
104. Blood sugar level - high or very high (>140 mg/dl) or taking medicine to control blood sugar level ²³ (%)	23.7	20.6	22.1	na
Hypertension among Adults (age 15 years and above)				
Women				
105. Mildly elevated blood pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	14.8	13.8	14.3	na
106. Moderately or severely elevated blood pressure (Systolic ≥160 mm of Hg and/or Diastolic ≥100 mm of Hg) (%)	6.5	5.9	6.2	na
107. Elevated blood pressure (Systolic ≥140 mm of Hg and/or Diastolic ≥90 mm of Hg) or taking medicine to control blood pressure (%)	26.4	23.4	24.8	na
Men				
108. Mildly elevated blood pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	20.1	19.0	19.5	na
109. Moderately or severely elevated blood pressure (Systolic ≥160 mm of Hg and/or Diastolic ≥100 mm of Hg) (%)	7.6	7.1	7.4	na
110. Elevated blood pressure (Systolic ≥140 mm of Hg and/or Diastolic ≥90 mm of Hg) or taking medicine to control blood pressure (%)	31.5	29.0	30.2	na

 ¹⁵Based on the last child born in the 3 years before the survey.
 16Based on the youngest child living with the mother.
 17Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is, receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group).

18 Below -2 standard deviations, based on the WHO standard.

 ¹⁹Below -3 standard deviations, based on the WHO standard.
 ²⁰Above +2 standard deviations, based on the WHO standard.

²¹Excludes pregnant women and women with a birth in the preceding 2 months.

²²Haemoglobin in grams per decilitre (g/dl). Among children, prevalence is adjusted for altitude. Among adults, prevalence is adjusted for altitude and for smoking status, if known. As NFHS uses the capillary blood for estimation of anaemia, the results of NFHS-5 need not be compared with other surveys using venous blood. ²³Random blood sugar measurement.

Indicators		NFHS-5 2020-21)	NFHS-4 (2015-16)
Screening for Cancer among Adults (age 30-49 years)	Urban	Rural	Total	Total
Women				
111. Ever undergone a screening test for cervical cancer (%)	10.0	9.6	9.8	na
112. Ever undergone a breast examination for breast cancer (%)	5.9	5.3	5.6	na
113. Ever undergone an oral cavity examination for oral cancer (%)	1.3	1.1	1.2	na
Men				
114. Ever undergone an oral cavity examination for oral cancer (%)	0.3	1.0	0.7	na
Knowledge of HIV/AIDS among Adults (age 15-49 years)				
115. Women who have comprehensive knowledge ²⁴ of HIV/AIDS (%)	24.6	22.8	23.6	16.0
116. Men who have comprehensive knowledge ²⁴ of HIV/AIDS (%)	31.1	22.4	26.6	10.9
117. Women who know that consistent condom use can reduce the chance of getting HIV/AIDS (%)	80.7	75.6	77.9	64.7
118. Men who know that consistent condom use can reduce the chance of getting HIV/AIDS (%)	89.7	90.4	90.1	79.8
Women's Empowerment (women age 15-49 years)				
119. Currently married women who usually participate in three household decisions ²⁵ (%)	91.8	93.7	92.8	84.0
120. Women who worked in the last 12 months and were paid in cash (%)	35.4	45.5	40.8	30.5
121. Women owning a house and/or land (alone or jointly with others) (%)	43.2	52.0	47.9	36.2
122. Women having a bank or savings account that they themselves use (%)	92.7	91.7	92.2	77.0
123. Women having a mobile phone that they themselves use (%)	81.2	68.9	74.6	62.0
124. Women age 15-24 years who use hygienic methods of protection during their menstrual period ²⁶ (%)	98.6	98.0	98.3	91.4
Gender Based Violence (age 18-49 years)				
125. Ever-married women age 18-49 years who have ever experienced spousal violence ²⁷ (%)	32.9	42.2	38.1	40.7
126. Ever-married women age 18-49 years who have experienced physical violence during any pregnancy (%)	3.3	3.4	3.3	6.2
127. Young women age 18-29 years who experienced sexual violence by age 18 (%)	0.0	0.0	0.0	0.9
Tobacco Use and Alcohol Consumption among Adults (age 15 years and above)				
128. Women age 15 years and above who use any kind of tobacco (%)	2.3	7.3	4.9	na
129. Men age 15 years and above who use any kind of tobacco (%)	16.7	23.3	20.1	na
130. Women age 15 years and above who consume alcohol (%)	0.2	0.4	0.3	na
131. Men age 15 years and above who consume alcohol (%)	21.5	29.2	25.4	na

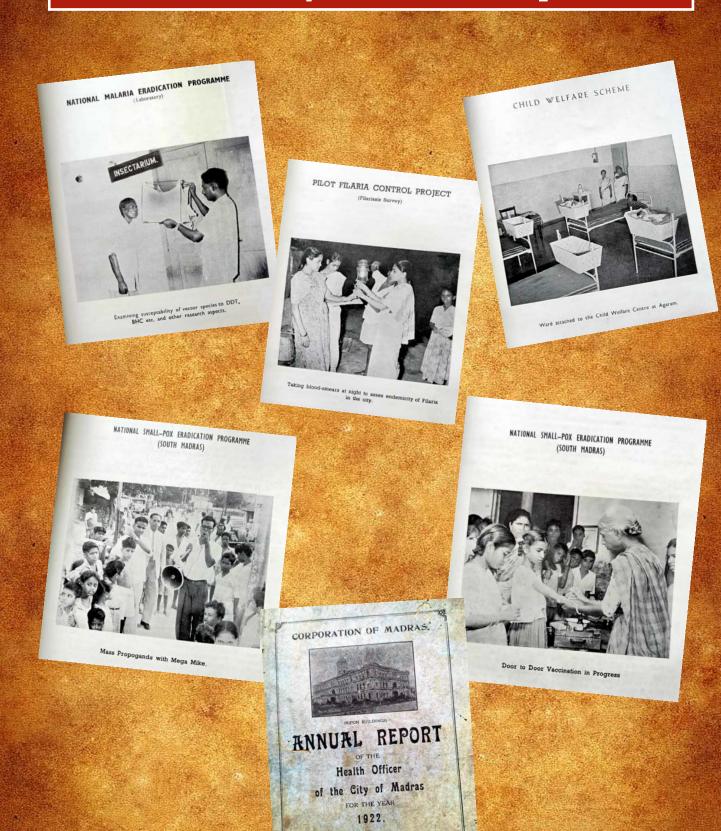
²⁴Comprehensive knowledge means knowing that consistent use of condoms every time they have sex and having just one uninfected faithful sex partner can reduce the chance of getting HIV/AIDS, knowing that a healthy-looking person can have HIV/AIDS, and rejecting two common misconceptions about transmission or prevention of HIV/AIDS.

25Decisions about health care for herself, making major household purchases, and visits to her family or relatives.

26Locally prepared napkins, sanitary napkins, tampons, and menstrual cups are considered to be hygienic methods of protection.

27Spousal violence is defined as physical and/or sexual violence

Activities in City of Madras Corporation





















Legends of Public Health in the Present & Past





LT. COL. W.G. KING, CIE., IMS., SANITARY COMMISSIONER 1894 to 1906



LIEUT.COL. A.T.H. RUSSELL.
CBE. MA. MD. DPH IMS 14.04.21 to 09.08.31



LIEUT.COL. C.M.GANAPATHY
M.C.M.P. CH.B (EDU) DPH (CAMB) IMS 15.10.34 to 13.08.41



RAO BAHADUR DR.R.ADISESHAN



RAO BAHADUR DR.R.M. MATHEW

MBBS. BSSc, DTMAH (CAMB) DPH, CAMB. MRCPP
16.08.44 to 18.02.245 : 15.05.46 to 04.10.49

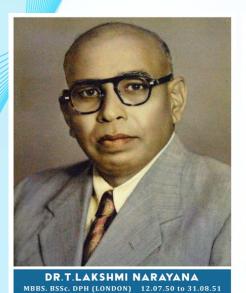


DR.R. SUBRAMANIAM
LMS. BSSc. M.P.H (HAR) 03.10.49 to 11.07.50



Legends of Public Health 9 in the Present & Past









DR.T.S. ADISUBRAMANIAM DPH (ENGLAND) 03.02.54 to 14.11.56









Legends of Public Health in the Present & Past



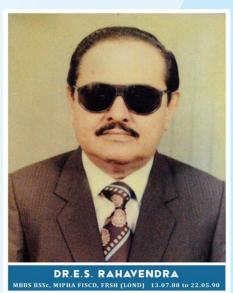






DR.A. PANCHAPAKESAN MBBS BSSc. DPH & P.M 10.10.77 to 31.5.78





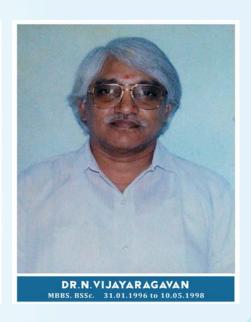


Legends of Public Health Seg in the Present & Past















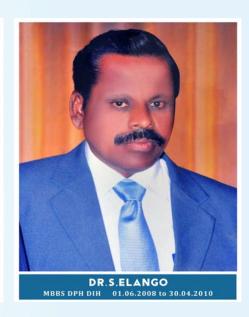


Legends of Public Health in the Present & Past



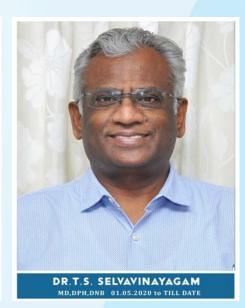












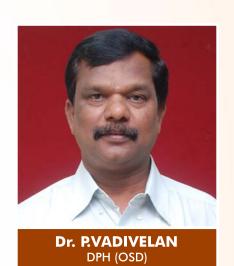


DPH Centenary Year Directorate Officials (2022)

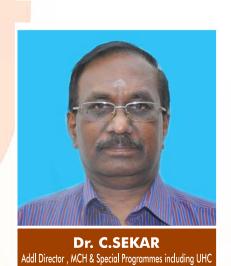


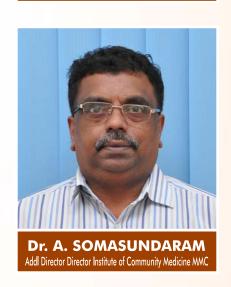


DPH (OSD)













Addl Director (NHM)







DPH Centenary Year Directorate Officials (2022)

















JD (PHC)







DPH Centenary Year Directorate Officials (2022)



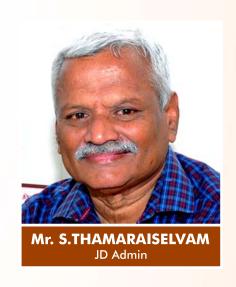


JD (NHM)

Dr. SATHISH RAGHAVAN
JD (TNSACS)

















DPHICON 2022

TAMILNADU'S REMINISCENCE ON PUBLIC HEALTH - AN INTERNATIONAL CONFERENCE

THEME **EXCELLENCE IN PUBLIC HEALTH**









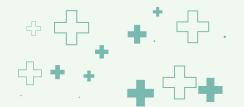
Radisson Blu Resort Temple Bay, Mamallapuram, East Coast Road,

TamilNadu, India.



www.dphicon2022.com 100yearsdph@gmail.com / dphicon2022@gmail.com +91-99629 46444







Welcome to DPHICON 2022! An International Public Health Conference

Dear Friends and Colleagues,

We proudly announce that the Department of Public Health is organising International Conference on Public Health commemorating the 100 years of establishment of the Directorate of Public Health (1922-2022). Tamil Nadu is a forerunner for many public health initiatives in the country. It is the first state to have a distinctive Public Health Cadre and also first state to enact the Public Health Act in 1939.

On behalf of the Directorate we would like to officially invite you to participate and celebrate this Historical Milestone event. The 5 days event including the Pre conference, following the Torch Ceremony, is to bring together all the fraternity who directly or indirectly contributed to the welfare of the people of Tamil Nadu through various Public Health Policies and Strategies.

The conference will focus on Public Health Leadership and Governance, Health Financing, Public Health Challenges in Global, National and State context, Service Delivery, Health Workforce, Intersectoral coordination in delivering Primary Health Care services, Innovations in Public Health, Drugs, Vaccines & Logistics and Information Technology in Public Health.

The event will incorporate extensive discussions apart from workshops, Guest Speaker Plenary, Panel Discussions etc. It will be an excellent and exceptional opportunity which will enable students of Public Health and Community Medicine, showcase their research chance to debate pressing global issues, challenging them to take on new perspectives, and building strong new ideas in Public Health to become the world leaders of tomorrow to face any type of Public Health Challenges.

We look forward your valuable presence to make this Conference a successful event. Thanks for your support in advance.

Dr. A. Somasundaram M.B.B.S., M.D., DPH., M.A.E., Dr. T.S. Selvavinayagam M.B.B.S., M.D., DPH., D.N.B., Organising Secretary, DPHICON 2022,

Chennai - 06

Chairperson, DPHICON 2022, Chennai - 06





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Dr. K.C. Cheran, Dr. M. Jagadeesan



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Dr. T.A. Devaparthasarathy



Scientific Committee:

Dr. G. Jerard Maria Selvam



Invitation & Dissemination Committee:

Dr. P. Sampath, Dr. G. Hemalatha



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Dr. P. Seenivasan

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PHICON 2022



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Thiru. B. Arivuchelvan

Thiru. Bharanidharan K

Thiru. S. Anandan

Thiru. Silambarasan S

DPHICON 2022 PRE – CONFERENCE WORKSHOP 05.12.2022

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THEME: OPERATIONAL RESEARCH ON PUBLIC HEALTH

Chairperson: **Dr. G. Jerard Maria Selvam,** Additional Director of Public Health **Dr. S. Sudharshini,** Associate Professor of Community Medicine, MMC

TIME	OPERATIONAL RESEARCH AND PROTOCOL DEVELOPMENT	SPEAKERS
09.30am - 9.35am	Welcome and Introduction about Academy for Public Health	Dr. K. Shivaram Selvakumar Senior Advisor, Academy for Public Health
09.35am - 10.00am	Operational Research: what, why and how? Operational Research into policy and practice	Dr. DSA Karthickeyan Founder and Chair, Academy for Public Health
10.00am - 10.30am	Research principles: determinants and outcomes	Dr. Thaddeus Alfonso Secretary General, Academy for Public Health
10.30am - 11.00am	Research terminology and definitions: Study design, Population, Sampling, and Variables	Dr. Thaddeus Alfonso Secretary General, Academy for Public Health
11.00am - 11.15am	Tea Break	
11.15am - 12.15pm	The research questions and Protocol development	Dr. DSA Karthickeyan Founder and Chair, Academy for Public Health
12.15pm - 12.40pm	How to do a literature search using, PUBMED and Demonstration of the use of a reference management tool Mendeley	Dr. DSA Karthickeyan Founder and Chair, Academy for Public Health
12.40pm - 01.00pm	Ethics Considerations of Research Protocols	Dr. Thaddeus Alfonso Secretary General, Academy for Public Health
01.00pm - 01.15pm	The role of investigators and authors and English Language for Medical Writing	Dr Vanithapriyaa Program Manager, Academy for Public Health
01.15pm - 02.00pm	Lunch Break	
	SCIENTIFIC PAPER WRITING	
02.00pm - 02.15pm	Publishing without perishing, Refreshing data analysis	Dr. DSA Karthickeyan Founder and Chair, Academy for Public Health
02.15pm - 02.40pm	Paper Narrative: Introduction, Methods, Results, Discussion	Dr. Thaddeus Alfonso Secretary General, Academy for Public Health
02.40pm - 02.55pm	Tables and figures	Dr Vanithapriyaa Program Manager, Academy for Public Health
02.55pm - 03.10pm	Abstract, Title, Funding, authorship	Dr. DSA Karthickeyan Founder and Chair, Academy for Public Health
03.10pm - 03.25pm	Tea Break	
03.25pm - 03.40pm	Submission of the paper and peer review, Dealing with peer review and Communication after publication	Dr. Thaddeus Alfonso Secretary General, Academy for Public Health
03.40pm - 04.00pm	English Language for Medical Writing publication	Dr Vanithapriyaa Program Manager, Academy for Public Health
HALL B	THEME: IMPORTANCE OF CIVIL REGISTRATION AND VITAL STATIST	TICS IN PUBLIC HEALTH
ISLE OF WATER	Chairperson: Mr. Sajjan Singh R. Chavan, I.A.S., Director of Census Operations Mrs .VR Sumathi, Joint Director, State Bureau of Health Intelligence	s & Joint Registrar General of India
TIME	TOPICS	SPEAKERS

TIME	TOPICS		SPEAKERS
09.15am - 09.30am	What is Civil Registration and Vital Statistics?		Dr. Hilde De Graeve Team Leader – Health System, WHO
09.30am - 09.45am	Birth and Death Registration - Turning all Stones		Mr. Sajjan Singh R. Chavan IAS Director of Census Operations & Joint Registrar General of India
09.45am - 10.00am	RBD act & processes for event registration in Tamil Nadu		Mrs. VR Sumathi Joint Director, SBHI, Tamil Nadu
10.00am - 11.30am	Ascertaining causes of death & group work	Dr. Chalapati Rao Associate Professor, Australian National University	Dr. Anand Kumar Paulraj State CRVS Officer, WHO - India
11.30am - 11.50am	Tea Break		
11.50am – 01.20pm	Digitizing cause of death information (e-Mor)	Dr. Sukanya R Scientist - E, NCDIR (ICMR)	Dr. Abishek S State Nosologist, State Bureau of Health Intelligence
01.20pm - 01.30pm	Feedback & Vote of thanks		

DPHICON 2022 PRE – CONFERENCE WORKSHOP 05.12.2022

HALL C BALL ROOM 1 THEME: SOCIETAL DYNAMICS IN PUBLIC HEALTH

Chairperson: **Dr. K.S.T. Suresh**, Joint Director of Public Health (PHC)

Prof. Keith Gomez, Former professor of Social work, Loyola College, Psychotherapist, Chennai

TIME	TOPICS	SPEAKERS
9.30am - 10.00am	Role of Medical Social Work in Public Health Interventions Session Chairpersons: Dr. K. Sekar, DPSSDM Consultant - PWB, Ms Uma Suresh, Freelance Counselor and Trainer	Dr. M.D.Rohini Krishnan Former Social Welfare Officer Mr.C. Augustine Social Worker, LCECU, CMC
10.00am - 11.00am	Psychiatric Social Work - Solutions for Mental Health Challenges as Public Health Burden Session Chairpersons: Dr. Sinu, Dept of Social Work NIMHANS, Dr. Kirubakaran, Research Assistants Schizophrenia Reasearch Foundation	Ms. Sangeetha Research Officer (SCARF) Dr. Kirubakaran Prof. Social Work Loyola College Prof. Preenu Ashok Consultant Psychotherapist
11.00am - 11.15am	Tea Break	
11.15am - 12.15pm	Children and Family Social Work and Health Session Chairpersons: Prof. Fr. Das, Student Counsellor Arulanantham College	Prof. Dr. Francis Adaikkalam AP Faculty in Social Work Loyola College
12.15pm - 01.15pm	Social Work Research for Public Health- Beyond SDG Session Chairpersons: Prof. Dr. Simon , Managing Trustee Interdependent Compassion Trust (ICT) Health reforms in Special Groups Session Chairpersons: Prof. Dr. Simon , Managing Trustee Interdependent Compassion Trust (ICT)	Dr. Lalitha Faculty, RGNIYD, Sriperumbudur Dr. K.Sekar Consultant - DPSSDM Consultant - PWB
01.15pm - 01.45pm	Social Work & Public Health: Future Collaboration to Enhance Patient Care in Tamil Nadu	Dr. Anish Associate Professor Rajagiri Medical of Social Science
	THEME: HEALTH ECONOMICS IN PUBLIC HEALTH	
HALL D BALL ROOM 2	Chairperson: Dr. V. Satish Ragavan, Joint Director of Public Health (TANSACS)	

TIME	TOPICS	SPEAKERS
TIME	TOPICS	SPEAKERS

10.00am - 10.30am	Quantifying Health benefits- Insurance and Public Health	Prof. Mariappan HOD Health Economics TISS, Mumbai.
10.30am - 11.00am	Economic Evaluation of data	Dr. M. Muniyandi Scientist C, NIRT
11.00am - 11.15am	Tea Break	
11.15am - 11.45am	Economic Modelling for Evidence Based Decision Making	Dr. Antony Stanley Senior Research Officer, SCTIMST
11.45am - 12.30pm	Need for Financial Navigation services to alleviate Financial distress	Dr. Prasanna Thirunavukkarasu Associate Professor, Department of Community and Family Medicine AIIMS Jodhpur

Dr. Muraleedharan. VR. Ph.D., Professor, Department of Humanities and Social Sciences, IIT

DPHICON 2022 PRE – CONFERENCE WORKSHOP 05.12.2022

HALL E	
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Part 1	

THEME: RECENT ADVANCES IN LEGISLATION RELATED TO PUBLIC HEALTH

Chairperson: **Dr. P. Sampath,** Joint Director of Public Health (Communicable Diseases)

TIME	TOPICS	SPEAKERS
09.30am - 10.15am	Public Health Act- Time to Amend	Dr. Mathivanan Retd. Deputy Director Public Health
10.15am - 11.00am	Safe food is a Public health Priority- Through The FSSAI	Dr. T. A. Devaparthasarathy Additional Commissioner Food Safety, Tamil Nadu
11.00am - 11.30am	Tea Break	
11.30am - 12.30pm	Challenges in Child Health- Protection of Children From Sexual Offences Act - POCSO	Mr. Dhanasekara Pandiyan Joint Director, Dept of Social Defence Govt of Tamil Nadu
12.30pm - 01.30pm	Lunch Break	
Part 2	Chairperson: 1. Dr. K. Krishnaraj, Joint Director of Public Health (Non - Communicable Di	seases)
01.30pm - 02.15pm	Legal support for Mental Health	Dr. M. Malaiappan HOD Psychiatry, Kilpauk Medical College and Hospital
02.15pm - 03.00pm	Ending Discrimination- HIV Act and Transgender act	Dr. L. Ramakrishnan Vice President SAATHII
03.00pm - 03.15pm	TEA BREAK	
03.15pm - 04.00pm	Ensuring tobacco Free generation - COTPA	Mr. S.Cyril Alexander Professional Social Worker, Founder, MACT
HALL F	THEME: COMPANION IN TAMIL NADU PUBLIC HEALTH JOURNEY	
PORT HALL	Chairperson: Dr. C. Sekar, Additional Director of Public Health and Preventive Medicine	3
TIME	TOPICS	SPEAKERS
9.30am - 10.00am	TOPICS Social Welfare Support programs - Abuse against Orphaned, Children, Women and Geriatric groups	SPEAKERS Mrs.Valarmathi IAS Director, Department of Social Defence
	Social Welfare Support programs - Abuse against Orphaned, Children,	Mrs.Valarmathi IAS
9.30am - 10.00am	Social Welfare Support programs - Abuse against Orphaned, Children, Women and Geriatric groups	Mrs.Valarmathi IAS Director, Department of Social Defence Ms. V. Amudhavalli IAS
9.30am - 10.00am 10.00am - 10.30am	Social Welfare Support programs - Abuse against Orphaned, Children, Women and Geriatric groups Nutrition and Public health- Interdisciplinary Approach	Mrs.Valarmathi IAS Director, Department of Social Defence Ms. V. Amudhavalli IAS Director ICDS, Department of Social Welfare Mrs. Anitha
9.30am - 10.00am 10.00am - 10.30am 10.30am - 11.00am	Social Welfare Support programs - Abuse against Orphaned, Children, Women and Geriatric groups Nutrition and Public health- Interdisciplinary Approach Building the Future- School and Public Health	Mrs.Valarmathi IAS Director, Department of Social Defence Ms. V. Amudhavalli IAS Director ICDS, Department of Social Welfare Mrs. Anitha
9.30am - 10.00am 10.00am - 10.30am 10.30am - 11.00am 11.00am - 11.15am	Social Welfare Support programs - Abuse against Orphaned, Children, Women and Geriatric groups Nutrition and Public health- Interdisciplinary Approach Building the Future- School and Public Health Tea Break	Mrs.Valarmathi IAS Director; Department of Social Defence Ms. V. Amudhavalli IAS Director ICDS, Department of Social Welfare Mrs. Anitha Joint Director (NSS), Department of School Education Dr. Rajamanikam Muruganandh
9.30am - 10.00am 10.00am - 10.30am 10.30am - 11.00am 11.00am - 11.15am 11.15am - 11.45am	Social Welfare Support programs - Abuse against Orphaned, Children, Women and Geriatric groups Nutrition and Public health- Interdisciplinary Approach Building the Future- School and Public Health Tea Break Disaster Resilience - Joint hands of revenue and Public Health	Mrs. Valarmathi IAS Director, Department of Social Defence Ms. V. Amudhavalli IAS Director ICDS, Department of Social Welfare Mrs. Anitha Joint Director (NSS), Department of School Education Dr. Rajamanikam Muruganandh Capacity Building and Training Counsultant Dr. M. Jagadeesan
9.30am - 10.00am 10.00am - 10.30am 10.30am - 11.00am 11.00am - 11.15am 11.15am - 11.45am 11.45 am- 12.15pm	Social Welfare Support programs - Abuse against Orphaned, Children, Women and Geriatric groups Nutrition and Public health- Interdisciplinary Approach Building the Future- School and Public Health Tea Break Disaster Resilience - Joint hands of revenue and Public Health Challenges in delivering urban Health Services	Mrs. Valarmathi IAS Director, Department of Social Defence Ms. V. Amudhavalli IAS Director ICDS, Department of Social Welfare Mrs. Anitha Joint Director (NSS), Department of School Education Dr. Rajamanikam Muruganandh Capacity Building and Training Counsultant Dr. M. Jagadeesan City Health Officer, GCC Dr. Narnaware Manish Shankarrao IAS
9.30am - 10.00am 10.00am - 10.30am 10.30am - 11.00am 11.00am - 11.15am 11.15am - 11.45am 11.45 am- 12.15pm 12.15pm - 12.45pm	Social Welfare Support programs - Abuse against Orphaned, Children, Women and Geriatric groups Nutrition and Public health- Interdisciplinary Approach Building the Future- School and Public Health Tea Break Disaster Resilience - Joint hands of revenue and Public Health Challenges in delivering urban Health Services DRDA - For Healthy Villages- with Focus on WASH	Mrs. Valarmathi IAS Director, Department of Social Defence Ms. V. Amudhavalli IAS Director ICDS, Department of Social Welfare Mrs. Anitha Joint Director (NSS), Department of School Education Dr. Rajamanikam Muruganandh Capacity Building and Training Counsultant Dr. M. Jagadeesan City Health Officer, GCC Dr. Narnaware Manish Shankarrao IAS







Date: 06.12.2022 DPHICON 2022 Day 1

Date: (06.12.2022	DPHICON	2022	Day 1
TIME	TOPICS		SPEAR	KERS Hall A Ball Room
9.20am - 9.30am Purpose of the Conference	DPHICON 2022 : Conceptuali	zation		Selvavinayagam Public Health and Preventive Medicine
9.30am - 9.50am Plenary Session 1	Global Health Security Agend	la		gita Patel ealth Office, USAID
9.50am - 10.50am Panel Discussion 1	An Introspection and Way for Panelists: Dr. Aarushi Bhatnagar Senior Economist Forr	ve Implementation of PH Act : rward Sunil Nandraj Dr. P. Kugana mer Advisor, Consultant, Social Me lnfectious Diseases, Seriment of India	Former Ch ntham Dr. Pankaj Badamile licine and Head of the Department, Soc	a Vaidyanathan IAS lef Secretary, Government of Tamil Nadu al Shah Dr N.Chitra
10.50am - 11.10am		Tea Break		
11.10am - 12.20pm Panel Discussion 2	Panelists: Dr. Marion Jane Cros Senior Health Specialist. Assossciate Professional	essor, Dean (Research) & Dir of Public Director, SRIHER He	Additional (Environm Poornima Prabhakaran Dr. Rameshw	riya Sahu IAS Chief Secretary to Government of Tamil Nadu ent, Climate Change and Forests Department) ar Sorokhaibam Dr. K.C. Seran Additional Director,
12.20pm - 12.40pm Plenary Session 2		f Primary, Secondary and Tertia	ry care services Director, D	oj Jhalani epartment of Health Systems Development, rld Health Organization
12.40pm - 1.00pm Plenary Session 3	Sustainable Development Go	als and Tamil Nadu Health Syste	ms, 2030 Commission	ez Ahamed IAS ner, Department of Rural Development ayat Raj, Government of Tamil Nadu
1.00pm - 1.20pm Plenary Session 4	Nurse empowerment through regulations and policies			ie Grace Kalaimathi 'amil Nadu Nurses & Midwives Council
1.20pm - 2.00pm		Lunch Break		
2.00pm - 2.20pm Plenary Session 5	Public Health Challenges in Global, National and State Context Dr. Sudha Seshayyan M.S Vice Chancellor, Tamil Nadu Dr MGR Medical University			
2.20pm - 3.20pm Panel Discussion 3	Panelists: Dr. Sitanshu Sekhar Kar Professor & Head, Preventive Pro	f. of Community Medicine & Consultant, Principa	DI. nari	vansh Chopra resident, Indian Association of Preventive Medicine dhiran Dr. A. Somasundaram ical Officer, Director, Institute of
3.20pm - 3.40pm		Tea Break		
3.40pm - 4.50pm Panel Discussion 4				a Haque anager, HNP SAR, World Bank rof. V.R. Muraleedaran Dr. C. Sekar rully member, Department of Humanities Additional Director
4.50pm - 5.10pm Plenary Session 6	Emerging NCDs Including NA	FLD, Colon CA, CRDs etc	Team Lead	eve Hilde Rene Susanne er (Health Systems) try Office for India
5.10pm - 6.10pm Panel Discussion 5	Cutting Risk Factors Panelists: Dr. M. Suresh Kumar Research & Development Deput	Rana J Singh y Regional Director, nion, South East Asia Dr. V. Sabitha Prof. & Head of the Dep Govt. Chengalpattu Med	Dr. Pooi Director (F Dr. P.P. Kannan	rna Chadrika AC), Institute of Mental Health Dr. V. Satish Raghavan
6.10pm - 6.30pm Plenary Session 7	Primary Health Care and NCI	O Control - Gaps and Challenges		Frieden (Virtual) & CEO, Resolve to Save Lives (RTSL)
TIME	HALL B ISLE OF WIND	HALL C ISLE OF WATER	HALL D PORT HALL	HALL E NAUTICA
2.00pm - 5.30pm	Session 1 (* Session includes 20 Oral Presentations)	Session 2 (* Session includes 20 Oral Presentations)	Session 3 (* Session includes 20 Oral Presentations)	Quiz Prelims for Post-Graduates Quiz Prelims for Medical Officers Quiz Prelims for Staff Nurses / VHN/SHN/CHN/ANM Quiz Prelims for Health Inspectors / BHS







Date: 07.12.2022 **DPHICON 2022**

Date: (07.12.2022	DPHICON	2022	Day 2	
TIME	TOPICS			SPEAKERS Hall A Ball Room	
9.30am - 9.50am Plenary Session 1	Galvanising Multi Sectoral Re	alth Goals	Dr (Tmt) Beela Rajesh IAS Principal Secretary & Commissioner, Land Reforms, Government of Tamil Nadu		
9.50am - 10.10am Plenary Session 2	Leveraging the Learnings fro	e Immunization	Dr. Pradeep Haldar Former Expert Advisor, Government of India		
10.10am - 10.30am Plenary Session 3	COVID 19 : Public Health Emo	ergency - A Learning Experience	e from Tamil Nadu	Dr. J. Radhakrishnan IAS Principal Secretary to Government, Co-operation, Food and Consumer Protection Department, Govt. of T.N.	
10.30am - 11.30am Panel Discussion 1	Global Public Health Specialist,	HOD and Professor, Community Health	Dr. Asha Raghavan Sub Regional Team Leader, WHO - India, Chennai	Chair cum Moderator Dr. Runa H. Gokhale Associate Director for Science and Programs, Division of Global Health Protection Dr. Govindarajulu Srinivas Professor & Head, Department of Epidemiology, The Tamil Nadu Dr MGR Medical University	
11.30am - 11.50am		Tea Break			
11.50am - 12.10pm Plenary Session 4	Revisiting the Public Health S MMR & IMR beyond SDGs	Strategies for Incremental Reduc	ctionn of	Dr Kaushik Ganguly Social Policy Specialist (Child Survival), UNICEF India, Field Office for Tamil Nadu & Kerala	
12.10pm - 12.30pm Plenary Session 5	Innovations in Primary Heal	th Care - Learnings from Brazil		Dr. Edson Correia Araujo Senior Economist, World Bank	
12.30pm - 1.30pm Panel Discussion 2	One Health Approach			Chair cum Moderator Maj Gen (Prof) Atul Kotwal, SM, VSM Executive Director, National Health Systems Resource Centre	
	Panelists: Dr. Dinesh Nair Senior Health Specialist, World Bank Dr. Ashwani H Scientist-G and D VCRC, Pondicheri		rof. Rahul Narang an and Head of the Department, Microbiology, India Institute of Medical Sciences, Bibinagar	Dr. P. Manickam Dr. Jerard Maria Selvam Scientist F (Epidemiology), Head, Additional Director, NHM	
1.30pm - 2.10pm		Lunch Break			
2.10pm - 2.30pm Plenary Session 6	Enhancing managerial capac	y care professionals	Dr. Sanju Thomas Abraham Managing Director, Tamil Nadu Apex Skill Centre for Health Care		
2.30pm - 2.50pm Plenary Session 7	Revisiting the need for Multi Learnt Skills	- Tasking / Task Shifting / Putti	ng into Practice the	Dr. Himanshu Bhushan Advisor, Public Health Administration, National Health System Resource Centre (NHSRC)	
2.50pm - 3.50pm Panel Discussion 3	•	EMRI HOD of HR, IOC, Tamil Nadu Chairman	IGBC, Director,	Chair cum Moderator Dr. Sai Subhasree Raghavan Founder President and Managing Trustee, SAATHI njeen Prasad Pallipamula Partnerships, Strategies and Additional Director, TNHSRP	
3.50pm - 4.10pm	WOLIU DAIIK	& Puducherry Consultant Tea Break	r, World Bank Programs	s, JHIPEGO	
4.10pm - 4.30pm Plenary Session 8	Integrating IT platform for C	apacity Building for Public Healt	th Interventions	Thiru. Arun Kumar Selvaraj Deputy General Manager, Projects, ECHO India	
4.30pm - 4.50pm Plenary Session 9	THAIMAI - Tool for Effective	Tracking of Mothers and Childre	n	Dr. R. Arulanand State RMNCHA Consultant, UNICEF - India	
4.50pm -5.50pm Panel Discussion 4	Achieving Disease Eliminatio (TB, Malaria, Filaria, Measle:			Chair cum Moderator Dr. Mohan D Gupte Founder Director (Retd.), NIE & ICMR School of Public Health	
	Dr. ShyamKumar Sriram Assistant Professor (Tenure-Track), Senio	r. Nirmal Joe Dr. C. Padmapriy or Regional Director (H & FW), IFW, Government of India Director, National Insti	tute of Research Chairman of A	cademy EB Member, IAPTNSC Officer on Special Duty (OSD)	
5.50pm - 6.10pm Plenary Session 10 6.10pm - 6.30pm	Building the future - School based Primary care interventions Dr. Kanchana I Principal cum Reseat Community Mental Health for Staff Nurses - Need of the Hour Dr. Fabiola			Dr. Kanchana Khan Principal cum Research Director, Omayal Achi College of Nursing Dr. Fabiola Principal, Meenakshi College of Nursing	
TIME	HALL B ISLE OF WIND	HALL C ISLE OF WATER	HALL D PORT HAL	HALL E	
11.30am - 1.00pm	Session 4 (* Session includes 10 Oral Presentations)	Session 5 (* Session includes 10 Oral Presentations)	Session ((* Session includes 1 Oral Presental	6 Perspectives 1 n (* Session 10 includes 10	
2.00pm - 5.30pm	Session 7 (* Session includes 20	Session 8 (* Session includes 20	Session 9 (* Session includes 2	n (* Session	







Date: 08.12.2022 **DPHICON 2022**

Day 3
Hall A Ball Rooi
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TIME	TOPICS			SPEAKERS	Hall A Ball Room	
9.30am - 9.50am Plenary Session 1	Emerging & Re-emerging Info	ectious Diseases : Handling the	Uninvited Visitors	Dr. Soumya Swan Chief Scientist, World He		
9.50am - 10.10am Plenary Session 2	Time Tested Drugs & Equipm health care delivery in Tamil	nent Logistics System to reach th Nadu	e last mile	Thiru. Deepak Ja Managing Director, Tamil Nadu Medical Serv		
10.10am - 10.30am Plenary Session 3	Rational Prescribing/Anti-M	icrobial Resistance		Dr. Daniel vande Medical Officer, Division Centre for Disease Contr	of HealthCare Quality Program	
10.30am - 10.50am Plenary Session 4		ght against COVID Pandemic and I iblic Goods (DPGs) for Universal I		Thiru. Abhimany Officer in Charge, Health UNDP, India Country Off	Systems Strengthening,	
10.50am - 11.10am Plenary Session 5		rvention for Teachers and Stude d avoiding open air defecation	nts on		/irtual) gement Lab Assistant Dean of Civic Arts, Emerson College, USA	
11.10am - 11.30am		Tea Break				
11.30am - 12.50pm Plenary Session 6	1. Tamil Nadu model of Publ Tamil Nadu Health system	ic Health / Role of Public Health 1 - A Centenary Journey	Department in	Dr. P. Senthil Kun Principal Secretary, Heal Department, Govt. of Tai	th and Family Welfare	
	2. Role of Food Safety Depar	tment in Ensuring Public Health		Thiru. R. Lalvena	IAS ety and Drug Administration	
	3. Journey of Public Health C way forward	Care Delivery in control of HIV, A	IDS and	Thiru. T.N. Hariha Project Director, Tamil N	aran IAS adu State AIDS Control Society	
	4. Investing in Primary Heal	th Care - A step towards Univers	al Health Coverage	Tmt. Shilpa Prab	hakar Satheesh IAS al Health Mission	
	5. Additive effects of AYUSH services in control of Non-communicable Diseases				Dr. S. Ganesh IAS Commissioner, Indian Medicine & Homeopathy	
	6. Clean air, Water, Sanitatio Non-Communicable & Con	n, General waste management in nmunicable diseases	n prevention of	Thiru. P. Ponniah IAS Director of Municipal Administration		
	7. Scope of Government Hea	lth Insurance schemes in Prima	ry Health Care services	S Dr. S. Uma IAS Project Director, Tamil Nadu Health Systems Project		
	8. Human Resource Manager Services Recruitment Boa	ment in Primary Health Care - R rd (MSRB)	ole of Medical	Thiru. A.R. Glads Chairman, Medical Servi	tone Pushpa Raj IAS ces Recruitment Board	
12.50pm - 1.10pm Plenary Session 7	Artificial Intelligence and Ma	achine Learning Systems In Publ	ic Health	Ms. Aparna Krishnan Project Director, J-Pal, South Asia		
1.10pm - 1.50pm		Lunch Break				
1.50pm - 2.10pm Plenary Session 8	Ethical dilemma / Ethical con Public Health interventions	nsiderations in decision making	in implementing	Prof. Brogen Singh Akoijam Dean, Regional Institute of Medical Sciences, Imphal, Manipur		
2.10pm - 3.10pm	Special Session for Media					
3.10pm - 3.30pm Plenary Session 9	e-Lab Solutions for Commun	ity Health (LIMS)		Dr. V.S. Dhruwey (Chief District Health Offi	[Virtual] cer in Kheda district, Gujarat	
3.30pm - 3.50pm Plenary Session 10	Baseline Assessment of Cold Chain Points in the State 2020-21			Ms. Pooja Sanghv State Consultant, UNICE Tamil Nadu and Kerala		
3.50pm - 4.10pm Plenary Session 11	Quality Improvement Interventions in Health Care Facilities through TNHSRP		Dr. R.M. Meenaks Team Leader - Quality In Tamil Nadu Health Syste	nprovement Wing,		
4.10pm - 4.20pm		Tea Break				
TIME	HALL B ISLE OF WIND	HALL C ISLE OF WATER	HALL D PORT HALL		HALL E NAUTICA	
11.00am - 2.00pm	Session 10 (* Session includes 15	Session 11 (* Session includes 15	Quiz for Post - Grad Finals		nal for Staff Nurses / N/SHN/CHN/ANM	

** Presentors will be allowed 7 mins for Presentation & 2 mins discussion

Oral Presentations)

5.00pm **VALEDICTORY FUNCTION**









Quiz for Medical Officers Finals





Quiz Final for Health Inspectors



Oral Presentations)





