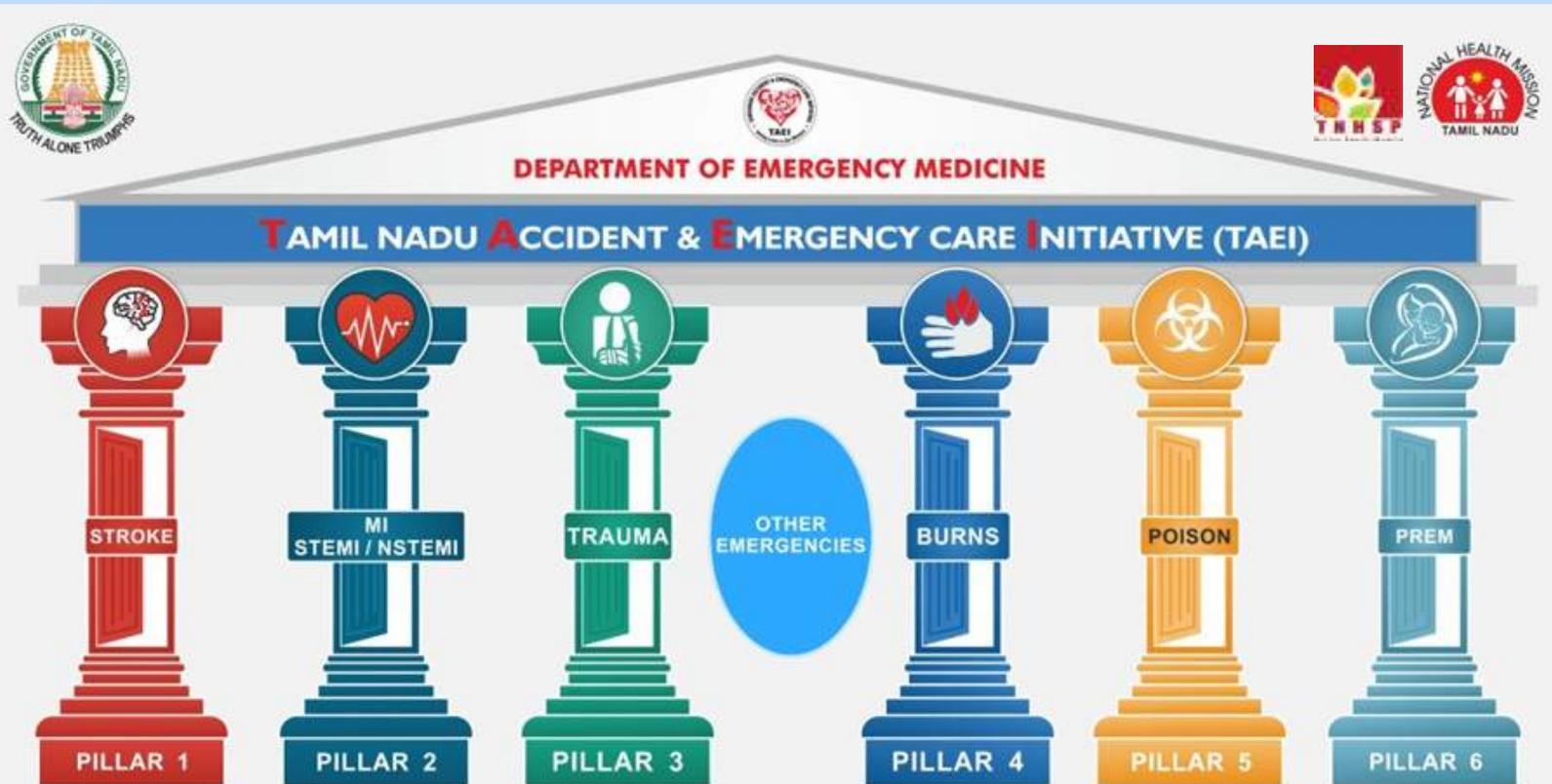


TAEI QUARTERLY GAZETTE



*The Official Newsletter of Tamil Nadu Accident and
Emergency Care Initiative (TAEI) Commissionerate*



July - September, 2025



FROM COMMISSIONER'S DESK

Tamil Nadu has earned nationwide recognition for its robust and responsive emergency care network, established under the Tamil Nadu Accident and Emergency Care Initiative (TAEI) of the Government. Through significant investments in infrastructure development, advanced equipment provisioning, and human resource strengthening, the traditional casualty units in Government Hospitals (GHs) and Medical College Hospitals (MCHs) have been transformed into streamlined Emergency Rooms (ERs) and Emergency Departments (EDs), respectively.

As of now, 113 TAEI centers are operational across the State, delivering high-quality, timely care to patients in critical need. Between January and September 2025, these centers have collectively managed a wide range of emergencies, including trauma, burns, myocardial infarction (MI), stroke, poisoning, and PREM (Paediatric Resuscitation and Emergency Medicine) cases.

In alignment with the Government Order, GO (Ms) No. 35 HFW(EAP.II/I) dated 10.02.2025, the TAEI Commissionerate at the State level has been reconstituted under the leadership of the Project Director, Tamil Nadu Health Systems Project (TNHSP), as the Commissioner of TAEI. This strategic restructuring aims to further strengthen the delivery and oversight of emergency care services throughout Tamil Nadu.

The Commissionerate is committed to real-time monitoring, continuous quality improvement, and comprehensive capacity building. Over the past month, significant progress has been made in conducting targeted training programs to upskill healthcare professionals involved in emergency care.

Our mission now moves beyond infrastructure and access — we are focused on ensuring clinical excellence, improved patient outcomes, and enhanced patient experience. This evolving approach marks a transformative shift: from emergency departments as reactive units to proactive, efficient, and patient-centered systems.

I urge each one of you — from ER staff to hospital administrators — to keep the momentum going. Continue to uphold the highest standards of care, report challenges promptly, and participate actively in trainings and audits.

Your work is saving lives, and your commitment is the foundation on which this system stands.

Dr. S. Vineeth, I.A.S
Commissioner, TAEI
Project Director, TNHSP
Government of Tamil Nadu

Monthly Activities



First Responder Training Programme

Focus: Basic Life Support (BLS) & Early Trauma Management

Organized Across 36 Medical College Hospitals

Training Date: 26.06.2025

Over 1,000+ Participants Trained

Spotlight:

Thoothukudi

- Inaugurated by:
- Collector Mr. ELAMBAHAVATH I.A.S.
- Participants: 32

Best Practices: Pre & post-tests to measure knowledge gap, Tamil-based training aids, "BLS Performer" badges to recognize high engagement .



Stanley Medical College

- Participants: 41 (Teachers, Labour Dept., NGOs, Tribal Welfare Officers)
- Highlights:
 - CPR hands-on practice
 - Realistic emergency role plays
 - Strong emotional connection
 - from real-life stories

RGGGH

- Participants: 17 (Forest Dept., School Teachers, Child Welfare)

KAPV Trichy

- Best Moments: Engaged: VAOs, Supervisors, Health Workers sharing real-world emergency responses.



Feedback Summary

- Knowledge Retention Improved: Pre/post test scores showed marked difference
- Confidence Boosted: Majority performed CPR for the first time
- Highly Appreciated: Tamil instructions, practical sessions, hands-on activities
- Suggestions for Improvement:
 - Include school children (6-12) in future sessions
 - Provide pamphlets in Tamil for post-training reference



Way Forward Planned

- Active monitoring of Emergency Medicine Departments (EMDs) across all districts
- Strengthened coordination between 108 EMS and in-hospital emergency services
- Continuous updates via State TAEI Surveillance Center and TAEI Registry

One-Day EMT Refresher Training - Strengthening Prehospital Emergency Care

The Tamil Nadu Health Systems Project (TNHSP), under the leadership of Dr. S. Vineeth, IAS, Project Director, successfully organized a One-Day Emergency Medical Technician (EMT) Refresher Training on 25th August 2025 at the TNHSP Auditorium, DMS Annexe, Chennai.

The training aimed to enhance the clinical knowledge, practical skills, and adherence to standardized emergency protocols among EMTs, EMLC instructors, and ambulance pilots working across the state. Around 70 participants representing various districts actively took part in the program.

The sessions included interactive lectures, live demonstrations, and scenario-based exercises focusing on trauma management, cardiac emergencies, airway handling, and effective prehospital communication. Experts from TNHSP and the Emergency Management Learning Center shared valuable insights to strengthen on-field preparedness and teamwork.

The refresher program reinforced TNHSP's continuous efforts toward building capacity, improving response efficiency, and ensuring high-quality emergency medical care for the people of Tamil Nadu.

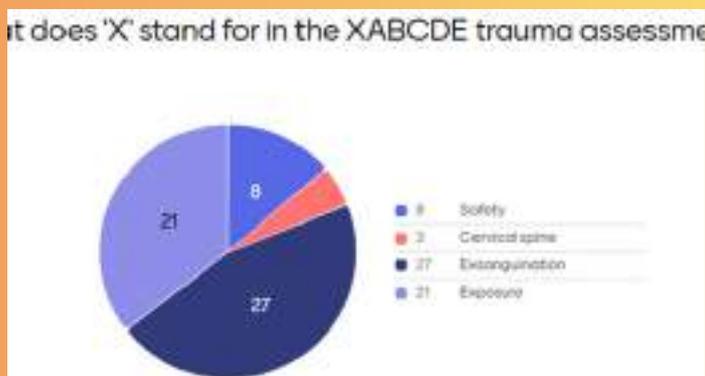


Inaugural Session

The programme commenced with a Welcome Address by Dr. Vijayakumar M., Deputy Director, Team Lead, TAEI, TNHSP, who highlighted the importance of continuous skill enhancement and the role of EMTs in delivering timely prehospital care across Tamil Nadu. This was followed by an Address by Mr. Selva Kumar M., State Head of Operations, EMRI, who emphasized the critical need for periodic refresher training to ensure that frontline responders remain well-equipped to handle diverse medical emergencies with confidence and precision.

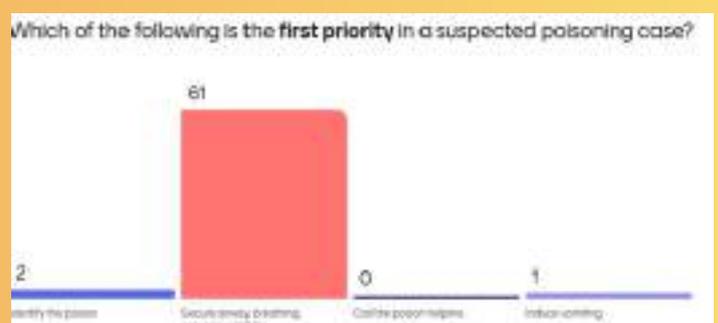
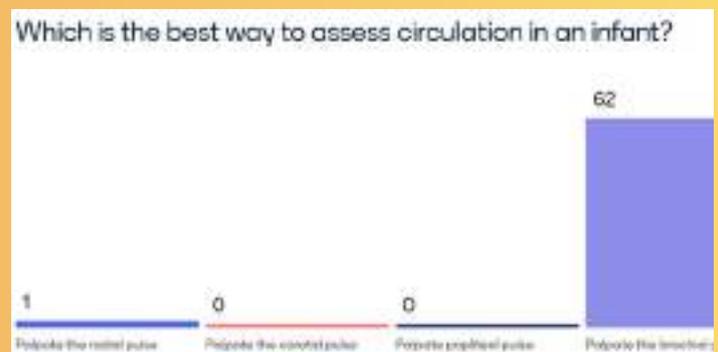
Highlights of the Session

- Prehospital & Transit Care Protocols – “First on Scene” guiding principles for EMTs.
- Case Study: Poison Bites & Stings – Bridging theory and practice in critical scenarios.
- Trauma Care: Do’s & Don’ts – Effective approaches to stabilize patients before hospital transfer.
- Pediatric & Stroke Emergencies – Rapid response strategies where every second counts.
- Cardiac Emergencies & Burns Management – Protocol-based approaches for timely intervention.
- Safe Handover & IFT Application – Demonstration on accurate documentation and smooth transfers.
- Hands-on Simulation Training – Practical exposure at the GVK Simulation Lab, focusing on teamwork and quick decision-making.



Interactive session

The activity fostered a healthy spirit of competition and collaboration among the participants, encouraging them to think critically and apply their field experience to real-world scenarios. By leveraging the Mentimeter app, trainers were able to create an interactive digital learning environment that provided instant results and visual feedback, keeping participants actively involved throughout the session. The use of this technology proved to be an effective tool to reinforce learning, enhance retention of key clinical concepts, and make the overall training experience both dynamic and impactful.



Expert Faculty

The sessions were enriched by eminent faculty including Prof. Dr. Hariharan (RGGGH), Prof. Dr. Bhavani (Stanley MC), Prof. Dr. Indumathi Santhanam, Dr. K. Mugundhan (RGGGH), Asst. Prof. Dr. Bala Subramaniam (KMC), and Prof. Dr. Kannan (RGGGH). Their vast clinical expertise and practical insights added both academic depth and real-world relevance to the training. The sessions featured case-based discussions, live demonstrations, and scenario-driven exercises, enabling participants to bridge theory with hands-on emergency care practices.



The distinguished faculty shared best practices, recent updates, and field-tested strategies to enhance patient assessment, stabilization, and transport efficiency. Their interactive and engaging teaching approach fostered active participation, encouraged experience sharing, and deepened the understanding of life-saving protocols. The collective expertise and dedication of the faculty greatly inspired participants to uphold excellence, precision, and compassion in their emergency response roles.



Conclusion



The day concluded with a post-test, participant reflections, and a Valedictory Ceremony, marking the successful completion of the programme. The refresher course reinforced protocol adherence, teamwork, quick decision-making, and patient-centered care in prehospital emergencies.

This initiative reflects TNHSP's ongoing commitment to capacity building and excellence in emergency medical services, ensuring that Tamil Nadu remains at the forefront of providing robust, responsive, and lifesaving care.

Recent Trends in Cardiac Interventions

The Commissionerate of Tamil Nadu Accident & Emergency Care Initiative (TAEI) hosted a highly impactful Continuing Medical Education (CME) Program on “Recent Trends in Cardiac Interventions” on 17th September 2025 at ITC Grand Chola, Chennai. The event witnessed the participation of leading cardiologists, senior clinicians, and faculty from across the country, who came together to deliberate on the latest innovations in Structural Heart Disease, Coronary Interventions, Paediatric Interventions, and Electrophysiology.



The sessions were formally inaugurated by Dr. Vineeth S., IAS, Commissioner of TAEI, and addressed by Dr. Arun Thamburaj, IAS, Mission Director, National Health Mission, Tamil Nadu, whose vision and support were instrumental in making the event a reality.

A special highlight of the CME was the felicitation of six Government Medical Colleges and Hospitals for their exemplary performance in Cardiac Intervention Procedures under the TN Heart Attack Management Programme in 2025.

“Timely Save with a Prudent Seal” - (Coimbatore Medical College & Hospital, Department of Cardiology) presents a case series on Coronary Artery Perforation (CAP) – a rare but serious complication of Percutaneous Coronary Intervention (PCI).

Brief Summary of the Context:

Introduction:

Coronary perforation occurs in 0.29–0.7% of PCI cases but can rise to 8.9% in complex or chronic total occlusion (CTO) interventions. Despite advances, significant angiographic perforations still occur in up to 30% of cases, with outcomes depending on severity and site.

Objective:

To highlight clinical presentation, management strategies, and outcomes from three cases of CAP, offering insights into this critical complication.

Discussion Points:

Prevention is key—anticipate complications in complex lesions.

Risk factors include high balloon-to-artery ratio (>1.2) without IVUS guidance, hydrophilic guidewires, and aggressive atherectomy techniques.

Management techniques include umbrella balloon, covered stents, and absorbable suture embolization (which allows eventual recanalization).

Case Summaries:

Three patient cases (aged 31–67 years) experienced different Ellis class I–III perforations during PCI procedures. Each was successfully managed with covered stents (Graftmaster) and supportive interventions, emphasizing prompt recognition and sealing of perforations.

Key Takeaway:

The presentation underscores that timely diagnosis, technical vigilance, and appropriate use of covered stents can effectively manage coronary perforations, turning a potentially fatal complication into a “timely save.”

Best Practices

Govt. Salem MCH - Our cardiac unit delivers protocol-driven STEMI care with rapid ECG transmission, cath lab activation within 10 minutes, and door-to-balloon time under 60 minutes. When PCI isn't immediately possible, our spoke-hub model enables early thrombolysis at secondary centres, improving outcomes. High-risk patients receive prompt pacing support, GDMT, and early rehabilitation. A dedicated STEMI nurse ensures adherence and follow-up, resulting in reduced mortality and better recovery.

Testimonial

Mrs.x, 49yrs/f admitted in Govt. Salem MCH with c/o chest pain since 3 hours , ECG showed acute inferior wall myocardial infarction.

Planned for primary percutaneous intervention , primary coronary angiogram showed RCA 100% occlusion and primary PTCA TO RCA
DONE

Awarded Institutions for Outstanding Performance (January – July 2025):

- **Government Rajaji Hospital, Madurai** — Recognized as the top-performing institution for conducting the highest number of procedures (2,295) .
- **Government Thanjavur Medical College and Hospital** — Commended for their exemplary commitment and service continuity, having performed 180 procedures even on Sundays.
- **Tamil Nadu Government Multi-Super-Specialty Hospital, Omandurar** — Honored for outstanding performance despite limited manpower, successfully completing 2,162 procedures without postgraduate support.
- **Government Pudukkottai Medical College and Hospital** — Appreciated for exceptional efficiency and dedication, achieving 964 procedures without a cardiology department and with only three cardiologists.
- **Government Theni Medical College and Hospital and Government Thiruvavur Medical College and Hospital** — Acknowledged for commendable service delivery with minimal resources, each operating with a single doctor who managed approximately 2.3 and 1.8 cases per day, respectively.





SCRIPT TRAINING PROGRAM

The latest SCRIPT training program was conducted in Rajiv Gandhi Govt General Hospital on 3rd September 2025, inaugurated by Dr. Vineeth. S, IAS, Project Director TNHSP & Commissioner of TAEI and welcomed by Dr. Shantaraman, Dean, Madras medical college RGGGH, which invited medical officers and paramedical staff from various spoke centres.



Academic Perspectives

01

Evidence based design which Aligns with global standards for acute stroke care emphasizing early intervention.

02

Operational clarity: Clear referral and treatment pathways via hub-and-spoke configuration.

03

Financial accessibility: Integration into state insurance schemes removes cost as a barrier.



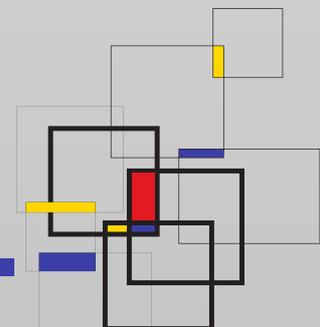
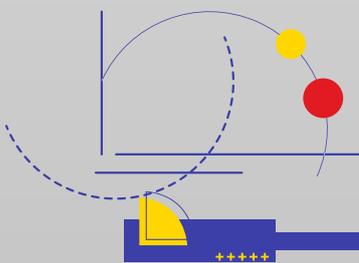
Hub-and-Spoke Model

Hubs:

- Rajiv Gandhi Govt General Hospital / Madras medical college serves as central stroke treatment facility

Spokes:

- Surrounding hospitals - Tambaram, Ponneri, Avadi, Chrompet etc act as referral points, quickly transferring patients to hubs for definitive care

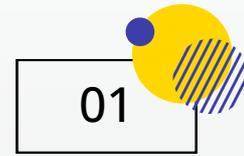


Key Components of SCRIPT



Rapid Intervention Strategy

Aims to deliver acute stroke care using timely administration of Plasminogen activator and access to Thrombectomy procedures, reducing the risk of long term paralysis and death.

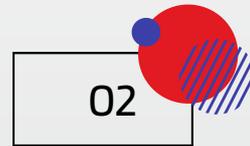


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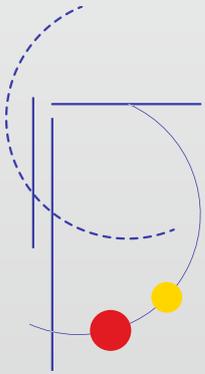


Cost Management & Insurance Coverage

The SCRIPT intervention, costing approximately ₹38,000 per dose, is covered under the Chief Minister's Comprehensive Health Insurance Scheme, ensuring affordability for patients.



02



Testimonial



The patient was admitted to the Neurology Intensive Care Unit (ICU) following successful thrombolysis for close neurological monitoring and supportive care. During the initial 24 hours of observation, the patient remained hemodynamically stable, and continuous neurological assessments were carried out to monitor for any post-thrombolytic complications.

On reassessment the following day, the patient showed a remarkable neurological recovery — there was significant improvement in limb power and speech, and he was able to stand and ambulate independently without assistance, indicating a positive and rapid response to therapy.

After one day of ICU observation, the patient was shifted to the general ward for continued management and rehabilitation. Standard secondary prevention measures were initiated, including antiplatelet therapy (blood thinners) and statins (cholesterol-lowering medication) to reduce the risk of recurrent vascular events.





BURNS TRAINING PROGRAM

Centers of Excellence & Government-Funded Burns Units

The **Kilpauk Medical College Hospital (KMCH)**, Chennai, serves as the **Centers of Excellence** for burn care in the state & **referral center**, catering to patients from Chennai and the surrounding districts. KMCH functions as the primary hub for specialized burn management, offering advanced critical care, reconstructive surgery, and rehabilitation services.

In line with Government of India guidelines, several Regional Burns Centers have been established across Tamil Nadu to ensure timely and accessible burn care:

1. Government Medical College and Hospital, Thanjavur
2. K.A.V.P. Government Medical College & Mahatma Gandhi Memorial Government Hospital, Trichy
3. Government Vellore Medical College and Hospital, Vellore
4. Government Mohan Kumaramangalam Medical College and Hospital, Salem
5. Government Medical College and Hospital, Coimbatore
6. Government Medical College and Hospital, Madurai

Additionally, a **Specialized Burns Center in Sivakasi**, Virudhunagar District has been established to address the high incidence of burn injuries associated with the district's firecracker and matchstick factories, which contribute to **approximately 70% of India's firecracker production**. This center is specifically equipped and staffed to manage high-risk and mass-casualty burn cases, ensuring rapid, comprehensive care for affected individuals.

Together, these centers form a robust network for burn prevention, acute management, and rehabilitation across Tamil Nadu, aligned with national standards and regional needs.



BURNS TRAINING PROGRAM



Academic & Training Activities

Since its inception in 1981, the department has been actively involved in academic training, offering:

- Structured training programs for Plastic Surgery and General Surgery Postgraduates with in-depth exposure to all aspects of burn management and reconstructive procedures.
- Clinical exposure for students from Nursing, Physiotherapy, and Occupational Therapy colleges.

ABOUT THE DEPARTMENT

The Department of Burns, Plastic and Reconstructive Surgery at **Government Kilpauk Medical College** is proud to be one of the largest burn units in South India. The department is equipped with:

- A 75-bedded exclusive Burn Unit
- A well-equipped ICU with laminar airflow system and individual cubicles
- An inbuilt Operation Theatre Complex
- A dedicated team of Plastic Surgeons and Staff Nurses providing 24/7 burn care
- An in-house Physiotherapy Unit
- A fully functional Skin Bank

During the inauguration of the new burns building, **the department was recognized as the Centre of Excellence for Burn Care and designated as an Apex Training Centre for burn management.**

National-Level Skin Banking Training

In 2023, the department conducted a **special training program on Skin Banking** for a team from the **Department of Burns, AIIMS, New Delhi**. The program was highly appreciated, and **within a week of the training, the AIIMS Skin Bank was successfully inaugurated.**



CONTINUING MEDICAL EDUCATION (CME) PROGRAMS

The department has organized multiple CME programs on burns as part of its commitment to ongoing professional development in burn care and reconstructive surgery. Additionally, in 2025, a state-wide quiz competition on burns was conducted alongside the CME for Plastic Surgery postgraduate students to encourage knowledge sharing and skill enhancement.

REFRESHER TRAINING (2025)

The Tamil Nadu Health Systems Project (TNSHP) under the Tamil Nadu Accident and Emergency Care Initiative (TAEI) successfully conducted a series of one-day refresher trainings on Burns Management for Doctors, Staff Nurses, and Physiotherapists from all 38 districts at Kilpauk Medical College Hospital, Chennai, during September–October 2025.

A total of 345 participants from institutions under DME&R and DMRHS were trained across seven batches. The sessions featured updated content from the Burns Management Module – Version 2.0, distributed to all participants. The valedictory function concluded with the Project Director / Commissioner of TAEI, felicitating the organizing team for their exemplary efforts in ensuring the smooth and successful completion of all seven batches.

Current projects include:

- **Burns in Epilepsy**
- A study on **reconstruction techniques** for **upper limb injuries** caused by **high-voltage electrical burns**.
- Role of **nutrition therapy** in **pediatric burn patients**.
- Study on the effect of **Dialkylcarbamoylchloride dressings** in **second-degree facial burns**.
- Study on the effect of **Hyperbaric Oxygen Therapy** in improving outcomes for **burn patients**.
- Evaluating the use of **Electro-activated Superoxidized Water** in burn wound care.
- A study comparing **PRP (Platelet-Rich Plasma)** with **conventional treatment** to assess how platelet levels help in **burn wound healing**.
- A study evaluating the **effectiveness of Hyperbaric Oxygen Therapy** in treating **second- and third-degree burns**.
- A study comparing **Fractional CO₂ Laser alone and Fractional CO₂ Laser with Triamcinolone** for managing **hypertrophic scars and keloids**.

Awards at Conferences

- Residents are regularly encouraged to participate in state-level and national-level conferences.
- Won Best Paper Award and Best Poster Award at the Mid-Term NABI Conference, Hyderabad (2023) for presentations on burn management.
- Secured Best Paper Award at APRASCON, Kakinada (2024).
- Achieved 3rd Place in Poster Presentation at NABICON, Ranchi (2024).

ONGOING RESEARCH

BURNS UNIT: CENTRE OF EXCELLENCE FOR BURN CARE

- **One of the largest burn units in South India**
- Serves as a **tertiary referral centre** for neighbouring states
- Holds **international recognition** for **excellence in burn care**
- Has trained numerous **super-specialists** in burns and plastic surgery **over the past 40 years**
- Published several **research articles** in prestigious **national** and **international journals**
- Contributed to **multiple textbooks** in burns and plastic surgery
- Hosted **visitors from burn centres worldwide**
- Designated as the **apex training centre** for the NHM-sponsored “Burns Management” training program and TNHSP-sponsored “Refresher Training Program on Burns Management,” educating medical personnel across the state

Best Practices

- **24/7 ICU care with individualized cubicles**
- **Dedicated Burns Operation Theatre**
- **In-house Physiotherapy for early mobilization and recovery**
- **Use of Hyperbaric Oxygen Therapy (HBOT) and CO₂ Laser Therapy**
- **Early excision & grafting strategies for improved survival**
- **Utilization of Cadaveric Allografts**
- **Stringent infection control, interdisciplinary coordination, and patient-centered care**

Testimonial

”

I am Arun, a 14-year-old student from a small fishing hamlet near Besant Nagar. A sudden gas leak at the beach caused severe burns to my face, arms, and legs. I was treated at the Burns Department, Government Kilpauk Medical College Hospital, where I received comprehensive care including advanced Hyperbaric Oxygen Therapy (HBOT). The dedicated team of doctors, nurses, and physiotherapists supported me throughout my recovery. After three weeks of treatment, I regained my strength, returned to school, and resumed my normal life. I remain deeply grateful to the team for their care and encouragement during my most difficult days.

Salem MCH operate a fully functional Burns Unit under the Department of Plastic and Reconstructive Surgery whose, Multidisciplinary burn care protocol emphasizes early triage, airway stabilization, and fluid resuscitation in the ER (TAEI Ward), with emergency fasciotomy performed promptly for compartment syndrome.

Patient care includes strict infection control, nutritional support using our indigenous **Samarpi formulation (a millet based health drink)** with protein supplements, and collagen application for superficial burns to promote faster healing and reduce pain. Early physiotherapy, splinting, eschar excision, and split-thickness skin grafting are routinely implemented, with amniotic membrane and artificial skin (MatriDerm, BTM) applied for select patients.

Post-recovery, customized compression garments prevent hypertrophic scarring, and reconstructive and rehabilitative surgeries address post-burn sequelae. Patients receive counseling, social reintegration support, disability certificates, and CMCHIS coverage is provided within 48 hours.

With support from Iyarkai Arakatalai Trust, Salem, nutritional supplements, artificial limbs, and compression garments are provided to needy patients every month.

Ongoing research includes validation of burn severity indices in electrical burns and the Modified Baux Score for mortality prediction.



Best Practice

Toxicology CME – Batch 1 & 2 Highlights

CME on Intensive Medical Care & Poison Management – North Zone Commissionerate of TAEI in partnership with the Institute of Internal Medicine, Madras Medical College & RGGGH, Chennai, successfully hosted the Training Course in Intensive Medical Care & Poison Management on 25th and 26th September 2025. The event brought together DME&R and DM&RHS medical professionals, faculty, and trainees from north zone to Continuing Medical Education (CME) program focused on toxicology and emergency care.



INAUGURATION & LEADERSHIP PRESENCE

The program was inaugurated by Dr. Vineeth S., IAS, Commissioner of TAEI and Prof. Dr. K. Shantaraman, M.D., Dean, MMC & RGGGH. Their presence underscored the importance of strengthening clinical preparedness and toxicology response across Tamil Nadu.

DEEP DIVE INTO POISON MANAGEMENT

The day featured a series of expert-led sessions covering:

- Approach to Poisoning & Drug Overdose – Dr. S. Ragunathanan
- Rapid Sequence Intubation & Mechanical Ventilation – Dr. V. Rajendran
- Snake Bite & Scorpion Sting – Dr. C. Rajendiran
- Hanging, Drowning & Electrocution – Dr. S. Senthilkumar
- Rodenticide Poisoning – Dr. Namitha Narayanan
- OPC & Paraquat Poisoning – Dr. D. Ramesh
- Plant Poisoning & Corrosives – Dr. A. Marimuthu
- Respiratory Failure & Oxygen Therapy – Dr. S. Sridhar

Interactive sessions, ward rounds, and case discussions added practical depth to the theoretical insights.

Hands-On Learning & Clinical Integration

The sessions were complemented by:

- Ward Rounds / Practical Session – Dr. K.R. Murugan
- Case Discussion & Q&A – Dr. S. Shiva Malarvizhi
- Pre- and Post-Course Assessments – Dr. K. Keerthi

Impact & Feedback

- Held at the Toxicology Seminar Hall, Tower Block II, the CME was lauded for its structured curriculum, expert faculty, and real-world relevance. Participants appreciated the blend of academic rigor and clinical applicability, with feedback highlighting the value of such initiatives in enhancing emergency response capabilities.



● ● Testimonial

A 19-year-old female, a primi ante natal mother of 28 weeks gestation from Attur presented on 30/09/2025 with multiple bee stings over both upper limbs. She was initially stable and treated with analgesics and antihistamines, but later developed painful swelling of both arms. Serial labs were monitored for sepsis and renal dysfunction, and fetal well-being was closely observed. Doppler showed cellulitis without DVT, and she was managed conservatively with IV fluids, antibiotics, and anti-edema measures. Her symptoms gradually improved, and she was discharged on day 10 with complete resolution of cellulitis.

**Govt. Salem Medical
College & Hospital -
Department of
Toxicology Unit**



PREM TRAINING PROGRAM

Introduction

The Paediatric Resuscitation and Emergency Medicine (PREM) Symposium, held on 24.09.2025 at TNHSP Auditorium, was a milestone event, bringing together nearly 121 paediatricians from across Tamil Nadu. Chaired by Dr. Vineeth S, IAS, the symposium reviewed critical PREM protocols, institutional performance, and system-wide improvements under the TAEI Commissionerate. Key focus areas included timely resuscitation, establishing dedicated PREM units in ERs, empowering nurses, and streamlining referral systems.



Since July 2024, regional PREM training sessions have been conducted at medical college hospitals by Prof. Indumathi Santhanam and master trainers from neighboring districts. These sessions have covered 17 districts—including Dharmapuri, Salem, Nilgiris, Coimbatore, Pudukkottai, Trichy, Karur, Dindigul, Kanyakumari, Tirunelveli, Thoothukudi, Vellore, Namakkal, Thiruvallur, Thiruvarur, Tiruppur, and Kallakurichi—successfully training 270 doctors and 300 nurses.

In addition, the PREM Skill Lab at ICH, Egmore, has emerged as a vital hub for continuous medical education, having conducted over 100 state-level training batches, benefitting more than 2,000 doctors and nurses. These collective efforts reaffirm Tamil Nadu's commitment to strengthening pediatric emergency care through structured training, protocols, and inter-institutional collaboration.



Feedback from Namakkal MCH:

The doctors were trained on the rapid assessment of physiological status of sick children that helps in quick triaging and early initiation of appropriate treatment that helps in preventing the morbidity and mortality. The queries of doctors with regard for the treatment like initiation of inotropes, its dosing and titration were clarified.

The staff nurses were trained regarding the organization of PREM unit, hands on skills were given on CPR, BMV techniques and how to organize trays in PREM Unit.

The following rectifications were suggested by the trainers and the actions taken are as follows:

- From 20/7/2025, onwards all realtime cases were assessed in the PREM Unit and those cases identified with altered physiological status were stabilized and then shifted to PICU.
- PREM trained staff nurses & CRRIs were made available during the morning shift.
- All children presenting with fever in OPD were assessed using PREM case sheets & triaged accordingly.
- Crash cart arranged as per protocol.
- PREM census board and PREM nominal register request given

Treatment Updates:

1) Avoid intubating a seriously ill child and connecting to mechanical ventilator immediately on arrival.

Prior to intubating critically ill children

- Ensure 100% saturation using BVM ventilation
- Secure IV/IO access and correct shock
- Concurrently document using PREM process
- Ensure inotrope infusion
- Prepare age-appropriate airway equipment, intubation medication as per SOAPME
- Organize team
- Anticipate worsening of shock and take appropriate measures.

2) Shock is associated with cardiovascular dysfunction and pulmonary oedema

Management of cardiovascular dysfunction and pulmonary oedema

- Use CPAP device (Jackson Ree circuit) to provide oxygen
- Fluid bolus therapy is based on small /large volume aetiologies
- Use PREM process to monitor response to fluid bolus therapy.
- Inotrope to be initiated only when signs of pulmonary oedema/hepatomegaly is noted

Management of unresponsiveness with seizure like movements

- Avoid administration of anti-convulsant on arrival
- Correct hypoxia by implementing airway manoeuvres and initiating BVM/JR
- Correct shock with cardiovascular dysfunction
- Use PREM process to establish physiological status using PREM triangle
- Identify Non convulsive status epilepticus and differentiate whether hypoxic NCSE or primary NCSE
- Obtain focussed history to understand aetiology
- Consider the need to administer anticonvulsant therapy.

Testimonial

Date: 06.10.2025 | Patient: 10-month-old boy

A nose stud accidentally aspirated during play was detected in the left lower lobe bronchus on X-ray at Kanchipuram. He was rushed to **ICH, Egmore**, and admitted to the ICU for urgent intervention.

The Pulmonology team skillfully dislodged the foreign body using flexible bronchoscopy and brought it up to the subglottic region. The ENT team then retrieved it through rigid bronchoscopy in the OT, with seamless anaesthetic support. A high-risk airway emergency was turned into a success story—thanks to exemplary teamwork and precision care.

Parent Advisory: Prevent Foreign Body Aspiration (Choking) in Young Children

- 🚫 No nuts (groundnuts, cashews, almonds, etc.) for children below 3 years — they can slip into the airway while eating or crying.
- ⚠️ Keep button batteries away — if swallowed, they can burn the food pipe or windpipe within hours.
- 🧩 Remove small objects from reach — beads, pins, coins, studs, toy parts, etc.
- 👩🏠 If your child suddenly coughs, wheezes, or struggles to breathe — rush to a hospital immediately. Do NOT try to remove the object at home.

A few precautions today can save a life tomorrow..

A 6-year-old female child was referred to **Salem MCH, Prem Unit** on 03/10/2025 following a **bee sting** incident on 01/10/2025 evening, with 12–15 sting sites over the body. On arrival at the PREM unit, the child complained of itching, abdominal pain, and vomiting. Examination revealed a stable airway, no respiratory distress, tachycardia, and shock, along with altered level of consciousness, angioedema, and urticarial rash. Immediate management included oxygen via NRM at 6 L/min, fluid resuscitation with 40 ml/kg normal saline, intramuscular adrenaline (0.1 ml/kg, 1.3 ml), and IV hydrocortisone 100 mg. Following stabilization, the child was shifted to the PICU for further monitoring and care.

During the PICU stay, the child received IV fluids and continuous vital monitoring. On the second day, she developed facial puffiness, periorbital edema, and decreased urine output. Laboratory investigations revealed acute kidney injury with urea 162 mg/dL, creatinine 2.9 mg/dL, normal sodium, and hyperkalemia (6 meq/L). Potassium correction was initiated, and nephrology consultation was obtained. She underwent 18 cycles of **peritoneal dialysis and 2 cycles of continuous renal replacement therapy (CRRT)**. Hourly urine output, serial renal function tests, electrolytes, and ABG were closely monitored. ABG showed metabolic acidosis, which was corrected with bicarbonate therapy.

Renal function gradually improved after 2 cycles of CRRT, and urine output normalized by day 8. The child continued to recover steadily and was discharged home on day 14 (17/10/2025) in stable condition, with normal renal parameters and overall good health.

Best Practice: Govt. Salem MCH

First Aid Awareness Session - Road Safety

A Traffic Awareness Programme was conducted by the Avadi Police Commissionerate on 16.09.2025 at the Police Convention Centre. The event featured the screening of a short film on road safety, followed by a First Aid Awareness Session led by the TNHSP First Aid Team for both participants and police personnel, enhancing preparedness and response awareness.



Awareness

Upcoming Event

Trauma Registry Portal 2.0 :

- The Trauma Registry Portal is currently being revamped to improve usability, accessibility, and real-time data capture. The redesigned version will feature a more user-friendly interface, simplified workflows, and enhanced reporting capabilities. New modules are being incorporated to support better clinical documentation, analytics, and decision-making. This upgrade aims to streamline trauma data management across all facilities and strengthen monitoring and evaluation efforts.
- The updated portal is set to be launched soon.

