



(Registered under Acts XXI of 1860 and XXIX of 1950)

**BRIGADE GAZETTE** 

GRATIS

March, 2016

No. 644

# PART - I NOTIFICATION NEW YEAR HONORS PARADE

The New Year Honors Parade of the Volunteers of the Corps will be held on Sunday, April 3, 2016 at 1030 hours at the Head Quarters when the Officer Commanding will take the Salute and unfurl the Society's Flag.

# NEWS

# First phase of Renovation of Dr. Moolgaonkar Memorial Hall

Renovation of Sanitary block of Dr. Moolgaonkar Memorial Hall has been carried out to suit need for conferences and various training courses. Past volunteer and retired Deputy Chief Engineer (Civil) of Brihan Mumbai Mahanagar Palika, Mr. Nitin S. Lalaji and Mr. Nitin Doshi Chartered Architect have supervised and executed the work. The work is carried out from the General fund of the society.

In the next phase stage of the hall, leak proofing, and Electrical wiring job will be done. In the final phase hall will modernize with A.C., Audio and Visual systems.

Philanthropists are requested by members of the Managing committee and in particular the president of our society Dr. Suresh D. Mehtalia and chairman Medical Board Dr. Deepak M. Parikh to donate generously for the next phase. Donations to the society are exempted under section 80G of income tax act.

We will place a portrait of the donor who donates Rs. 5 lacs or above, matching with the portraits of founders of the society already placed in the hall.

### Public Duty

Ambulance Car 12 (MH-01-L-9420) with trained staff and equipments such as First Aid box, extra stretcher, oxygen cylinder etc., was posted at Football Ground for football matches as under:

Sr. No.	Organiser	Date 2016	Time
1.	Saran Presents	January 24, 26 & 31 February 7,	9 am to 6 pm 9 am to 6 pm
2.	Goan's Sports Football	January 27 to 30 February 1 to 5 & 8 to 10	2.15 to 5.00 pm 2 pm to 6 pm 2-15 pm to 5-00 pm
3.	Catholic Gymkhana	February 14 February 14 to 19	9.30 am to 1.30 pm 5.30 to 11.00 pm

# One Day Workshop on First Aid

One day workshops on First Aid to the Injured for Three hours each day were conducted as under.

Date 2016	Participants	No. of Participants	Conducted at
January 21	Security and Fire Fighting staff	38	Indiabulls Finance Centre, Elphinstone Road (W), Mumbai-13
January 22	Security and Fire Fighting staff	41	Indiabulls Finance Centre, Elphinstone Road (W), Mumbai-13

YOU CAN VIEW BRIGADE GAZZETE ON WEBSITE (bcac.co.in)

February 20	F.Y. B.Sc. Students of Zoology	98	M.D. College, Parel, Mumbai

Donations to Service Station Fund

We have received following donation to the Service Station Fund of the Society  $\colon$ 

Date 2016	Amount (Rs.)	Donations received from	
January 4	501/-	Mr. Narsingh Das Khushalka	
January 9	2,000/-	Saran Presents Pvt. Ltd.	
January 21	10,000/-	Mrs. Roshan Kanga	
January 21	7,000/-	Mrs. Hilloo R. Damkewala	
January 21	1,001/-	Mr. Kashinath A Divecha	
February 18	1,000/-	Mr. Stevens	

## Donation to General Fund

We have received on February 8, 2016, Rs. 11,000/- donation to the General Fund of the Society from Aatmabodh Academy of Yoga.

# PART II

HISTORY OF CARDIO PULMONARY RESUSCITATION

### Mouth-to-mouth resuscitation

In the 19th century, Doctor H. R. Sylvester described a method (The Sylvester Method) of artificial respiration in which the patient is laid on their back, and their arms are raised above their head to aid inhalation and then pressed against their chest to aid exhalation. The procedure is repeated sixteen times per minute. This type of artificial respiration is occasionally seen in films made in the early 20th century.

A second technique, called the Dr. Holger Nielsen technique, described in the first edition of the Boy Scout Handbook in the United States in 1911, was a form of artificial respiration where the person was laid face down, with their head to the side, resting on the palms of both hands. Upward pressure applied at the patient's elbows raised the upper body while pressure on their back forced air into the lungs, in essence the Sylvester Method with the patient flipped over. This form is seen well into the 1950s (it is used in an episode of Lassie during the mid-1950s), and was often used, sometimes for comedic effect, in theatrical cartoons of the time (see Tom and Jerry's "The Cat and the Mermouse" [1949]). This method would continue to be shown, for historical purposes, side-by-side with modern CPR in the Boy Scout Handbook until its ninth edition in 1979. The technique was later banned from first-aid manuals in the UK.

Similar techniques were described in early 20th century jujutsu and judo books, as being used as far back as the early 17th century. A New York Times correspondent reported those techniques being used successfully in Japan in 1910. In jujutsu (and later on, judo) those techniques were called Kappo or Kutasu.

However, it was not until the middle of the 20th century that the wider medical community started to recognize and promote artificial respiration combined with chest compressions as a key



OUR TELEPHONE NOS. : 2201 42 95 and 6633 48 97 • Website : www.bcac.co.in

part of resuscitation following cardiac arrest. The combination was first seen in a 1962 training video called "The Pulse of Life" created by James Jude, Guy Knickerbocker and Peter Safar, Jude and Knickerbocker, along with William Kouwenhoven and Joseph S. Redding had recently discovered the method of external chest compressions, whereas Safar had worked with Redding and James Elam to prove the effectiveness of artificial respiration. It was at Johns Hopkins University where the technique of CPR was originally developed. The first effort at testing the technique was performed on a dog by Redding, Safar and JW Perason. Soon afterward, the technique was used to save the life of a child. Their combined findings were presented at the annual Maryland Medical Society meeting on September 16, 1960 in Ocean City, and gained widespread acceptance over the following decade, helped by the video and speaking tour they undertook. Peter Safar wrote the book ABC of Resuscitation in 1957. In the U.S., it was first promoted as a technique for the public to learn in the 1970s.

Artificial respiration was combined with chest compressions based on the assumption that active ventilation is necessary to keep circulating blood oxygenated, and the combination was accepted without comparing its effectiveness with chest compressions alone. However, research over the past decade has shown that assumption to be in error, resulting in the AHA's acknowledgment of the effectiveness of chest compressions alone (see Compression only in this article).

CPR has continued to advance, with recent developments including an emphasis on constant, rapid heart stimulation, and a de-emphasis on the respiration aspect. Studies have shown that people who had rapid, constant heart-only chest compression are 22% more likely to survive than those receiving conventional CPR that included breathing. What's more, because people tend to be reluctant to do mouth-to-mouth, chest-only CPR nearly doubles the chances of survival overall, by increasing the odds of receiving CPR in the first place.

#### Compression only

Compression-only (hands-only or cardio cerebral resuscitation) CPR is a technique that involves chest compressions without artificial respiration. It is recommended as the method of choice

SERVICE STATION STATISTICS				
Year 2016	January	February		
Calls Registered	07	04		
Removal Services	10	05		
Services for which NO donations were received	06	02		
Donations received on account of :				
Removal Services	₹ 400/-	₹2,200/-		
Donations to the Station Fund	₹ 1,000/-	₹ 20,502/-		
Run of Ambulance Car (No.12)	208 Kms.	689 Kms.		
Total services rendered till date	79,606	79,611		

Τo,

From :

for the untrained rescuer or those who are not proficient because it is easier to perform and instructions are easier to give over a phone. In adults with out-of-hospital cardiac arrest, compressiononly CPR by the lay public has a higher success rate than standard CPR. The exceptions are cases of drowning, drug overdose and arrest in children. Children who receive compression-only CPR have the same outcomes as those having received no CPR. The method of delivering chest compressions remains the same, as does the rate (at least 100 per minute). It is hoped that the use of compression-only delivery will increase the chances of the lay public delivering CPR. As per the American Heart Association, the beat of the Bee Gees song "Staying' Alive" provides an ideal rhythm in terms of beats per minute to use for hands-only CPR. One can also hum Queen's "Another One Bites The Dust", which is exactly 100 beats-per-minute and contains a memorable repeating drum pattern. For those with non cardiac arrest and people less than 20 years of age, standard CPR is superior to compression-only CPR.

## Prone CPR / Reverse CPR

Standard CPR is performed with the person in supine position. Prone CPR or reverse CPR is CPR performed on a person lying on their chest, by turning the head to the side and compressing the back. As the head is turned, the risk of vomiting and complications caused by aspiration pneumonia maybe reduced.

The American Heart Association's current guideline recommends performance of CPR in the supine position, and limits prone CPR to situations where the patient cannot be turned.

### Pathophysiology

CPR is used on people in cardiac arrest in order to oxygenate the blood and maintain a cardiac output to keep vital organs alive. Blood circulation and oxygenation are required to transport oxygen to the tissues. The physiology of CPR involves generating a pressure gradient between the arterial and venous vascular beds; CPR achieves this via multiple mechanisms. The Brain may sustain damage after blood flow has been stopped for about four minutes and irreversible damage after about seven minutes. Typically if blood flow ceases for one to two hours, then body cells die. Therefore, in general CPR is effective only if performed within seven minutes of the stoppage of blood flow. The heart also rapidly loses the ability to maintain a normal rhythm. Low body temperatures, as sometimes seen in near-drowning, prolong the time the brain survives. Following cardiac arrest, effective CPR enables enough oxygen to reach the brain to delay brain stem death, and allows the heart to remain responsive to defibrillation attempts.

— Curtsey Wikipedia

### KINDLY SEND YOUR OPTIONS TO RECEIVE BRIGADE GAZZETE ON WEBSITE (bcac.co.in) OR BY E-MAIL (send your email id)

Edited and Published by Captain R. J. Lad, D.E.R.E., Dip. Amb. Work, Officer Commanding, The Bombay City Ambulance Corps, at Head Quarters, 21 New Marine Lines, Mumbai - 400 020 and printed by him for the owners of the Publication "The Bombay City Ambulance Corps".





THE BOMBAY CITY AMBULANCE CORPS 21 New Marine Lines, Mumbai - 400 020. Telephone Nos. : 2201 42 95 & 6633 48 97