

SURAT FIRE INCIDENT-CASE STUDY AND LEARNING

HOW SAFE ARE THE COACHING INSTITUTES OF CHANDIGARH?

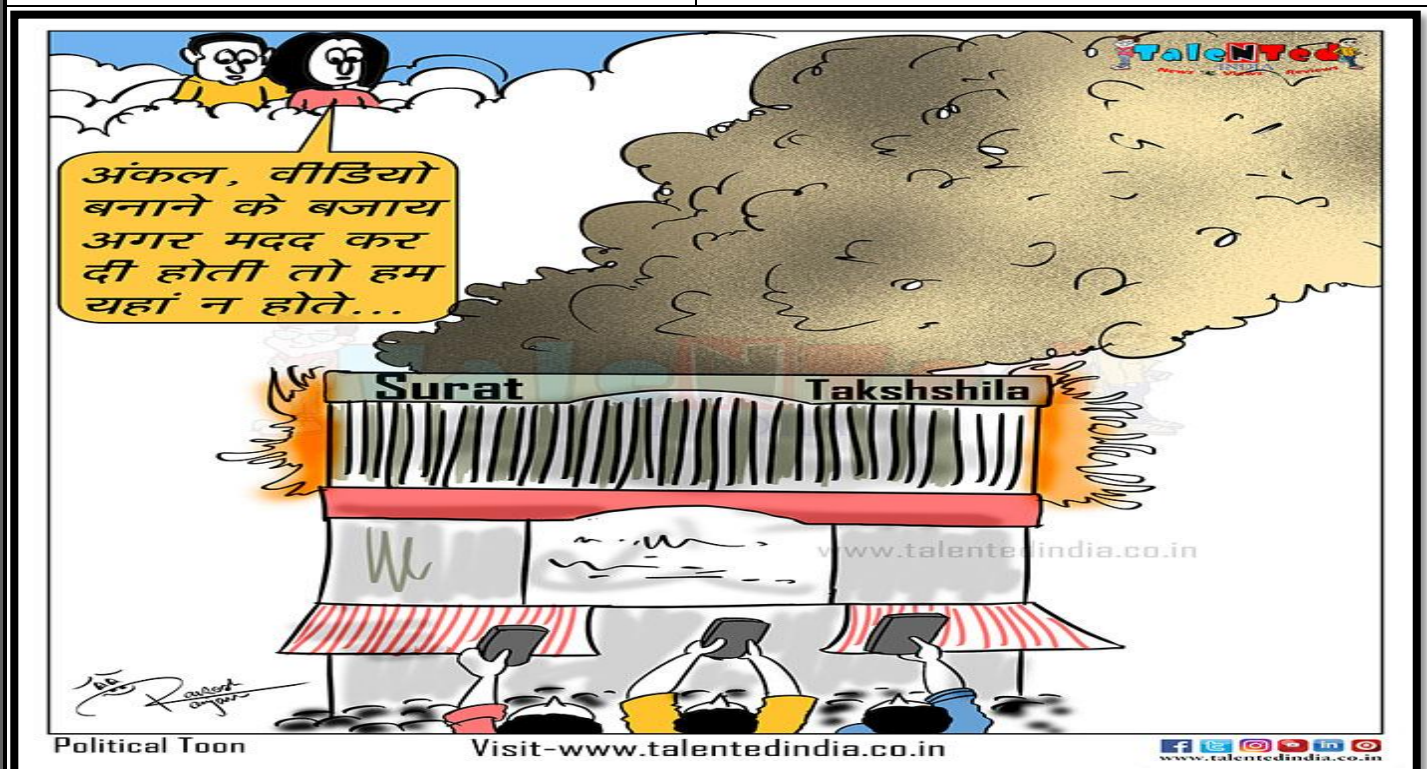


The unfortunate afternoon of **24th May 2019** shocked the countrymen when distressing visuals of a devastating fire in a Commercial complex in Surat (Gujrat) namely **Takshashila Arcade** began doing the rounds on social media. Within minutes, scenes of students of a coaching centre in this complex desperately trying to save themselves from the dense asphyxiate smoke, had gone viral on Facebook and WhatsApp and news channels were soon relaying the incident and related fire-fighting operations live. Spectator and bystanders were horrified to see the rapid intensification of the fire, with students clinging desperately to the exterior of the building to save themselves from its effects, and ultimately falling down as they lost hold. The fire was controlled and extinguished in the next couple of hours, but later searches confirmed **22 fatalities**, most of them students of a particular institute located on the top floor of the building.

LAPSES AND LEARNINGS FROM SURAT FIRE INCIDENT

LAPSES IN SURAT FIRE INCIDENT	LEARNINGS
Spread of Fire from Ground Floor to Terrace.	Lack of Passive Fire Protection. An adequate Passive Fire Protection measure restricts the spread of fire and smoke.
Inflammables are hugely used like Fluxes and Tires as seats.	Interior coatings, internal walls etc. are spreading the fire fast. Fire Load Must be calculated and checked on regular intervals.
Fire Tender was 45 minutes away and Hydraulic ladder reached in 45 minutes.	At least for 2 hour fire-fighting capacity must be available within every commercial and industrial establishment.
Ceiling Height was just 5 feet.	National Building Code of India shall be followed for safety compliance.
16 students died due to asphyxiation.	Smoke is more dangerous than fire. Smoke Extraction System, Ventilation and Maintaining Air Changes per Hour are critical aspects.
Makeshift Dome was the build on terrace where actual tragedy happened	Member of Structure, Wall, Floor and Roof etc. shall be as per National Building Code of India which guide on fire rating of each.
Short Circuit happened on Air Conditioner Circuit.	Continuous running loads will have fire hazard. Thermography and electrical audits will help to improve every time.
3 died as they jumped off the terrace of the building.	Inadequate exit staircase could have been the reason. Based on each floor occupant load, travel distance, number of exit must be calculated in a scientific manner rather than having one or two staircase.

LAPSES IN SURAT FIRE INCIDENT	LEARNINGS
No Safety Equipment in the building.	Requirement of Safety Equipment and Training & Awareness on how to use might have been saved many lives.
Heavy traffic and people taking videos at incident site.	If not able to extend support, others should not hamper the rescue team.
2 Floors was built without permission	Adherence to statutory will not only save the building owner/occupier from legal battle but it is for Personnel and Property Safety. At end it has business/commercial benefits.
There was no audit conducted for building.	All high rise buildings and industrial complex must conduct third party audit in every two year.
Another Staircase was locked.	Maintaining the equipment/facility "ready to use" is very critical which over a period of time building occupants ignore.
Couple of month's back similar incident happen in the same area in tuition centre where two people died.	Learning from previous or similar incident is very important to improve safety standards of each premises.



REALITY CHECK AFTER SURAT TRAGEDY
Coaching hub in Sec 34 not fire safe

TRAGEDY AWAITING Fire safety violations galore at multi-storied market, where institutes have blocked public passages



CHANDIGARH A day after 29 students were killed and dozens injured in a massive fire that broke out at a coaching centre in Surat (Gujarat), a reality check by Hindustan Times found many fire safety violations at the multi-storied coaching centres in Sector 34 in the city.

While many coaching centres were found blocking public passages, corridors, and ramps, others had no fire extinguishers and had blocked exits. In one of the buildings, a workshop was being run in the corridors.

This correspondent found that the elevators in the premises are only for staff and the students were using ramps and stairs for public passage. Further, the ramps in the buildings were used by the locked-up students.

Almost 75 students in a class. How are we supposed to leave the classroom through just one door if there is an emergency?

To make matters worse, the buildings have blocked fire exits and fire alarm systems.

Mehra Kumar, a student at the coaching centre, said, "The building is a maze. The fire exits are blocked. We have to go through a narrow passage to reach the exit. In case of an emergency, we will be unable to escape."

However, Chandigarh's fire department officials said that the building is not a coaching centre. It is a residential building. The fire department officials said that the building is not a coaching centre. It is a residential building. The fire department officials said that the building is not a coaching centre. It is a residential building.

NO RIGHT OF PASSAGE

Various coaching centres as well as hotels in the market of Sector 34 have blocked the passage for public passage. These blocked passages have been reported to the fire department. The fire department officials said that the building is not a coaching centre. It is a residential building. The fire department officials said that the building is not a coaching centre. It is a residential building.

ALL TANGLED UP

High-tension electrical wires hang from the walls close to the students, posing a risk of fire to a short-circuit. Tangles of wires are also seen in the corridors.

NO SAVING GRACE

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दाक पर ज़िंदगी

सेक्टर-34 में कोचिंग ले रहे हजारों बच्चों की जिंदगी खतरे में, नहीं घेत हाथ प्रशासन

जाने के लिए सिर्फ संकरी सीढ़ियां, इमरजेंसी गेट पर ताले..आग लगी तो बचना मुश्किल

सुरक्षा के खतरे

हॉटिंग और जालियां से जलने लगे बच्चे

सुरक्षा के खतरे

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मोहाली में भी हालात जुदा नहीं

सुरक्षा के खतरे

सुरक्षा के खतरे

सुरक्षा के खतरे

सुरक्षा के खतरे

अब बच्चे भी आसानी से बुझा देंगे आग

सुरक्षा के खतरे

सुरक्षा के खतरे

सुरक्षा के खतरे

सुरक्षा के खतरे

चंडीगढ़ के कोचिंग सेंटरों की सुरक्षा रॉब आसरे

ढाँहर सैफ्टी प्रूबिंगों की अहहेंद; मीटर बकसिआं दे चकन गाएिब; रोज़ पाएीपां ढटीआं

सुरक्षा के खतरे

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नियम पुरे ना करन वाले सेंटर घंटे हेंदगे: सलाहकार

पारकिंग विच ढाँहर गडौआं की घां मंसी

सैक्टर-34 की पारकिंग विच ढाँहर गडौआं लड़ी घटी घां गलत खूबूएीआं कर्ना नें मंसी हेंदी है।

नगीआं तारं कारन किसे वेले वी

ऑसिसीए विच नगी रॉल सकदे कोचिंग सेंटर

नैसल चिलड्रिंग केंद्र आठ इंडीआं अतुमार ऑसिसीए विच कोचिंग सेंटर चलादे री नगी ना सकदे।

विचारन नें नैसि देत रें घाअद सेंटर 'उे केंदी कारवाही नगी कीजी।

Sun, 26 May 2019 paper.punjabtribuneonline.com/c/39755500

Wake up call for city coaching centres

CHANDIGARH, MAY 25

The heart wrenching fire tragedy at a coaching centre in Surat, Gujarat, which claimed life of at least 23 students, has raised concerns over lack of fire safety arrangements at coaching institutes in the city, which is a hub of such institutions.



BURNING ISSUE: Students at a coaching centre with single entry and exit; and (below) an open power junction box at the entrance of another institute. MANOJ MAHAJAN

OVER 400 IN UT

Over 400 coaching institutes are being run in Sectors 34, 35, 8, 15, 17 and 36 — a majority of these from SCOs and SCFs with a common entry and exit.

Even as the Fire and Emergency Department in March issued notices to 34 institutes for violation under the National Building Code giving them 15 days to remove the discrepancies, there is no change in the situation on the ground.

Fire safety provisions are to be observed as per the National Building Code of India and the Delhi Fire Prevention and Fire Safety Act, 1986, as extended to the UT, Chandigarh. Chief Fire Officer Anil Garg did not respond to calls and messages.

MAJOR VIOLATIONS

- Electricity junctions installed on walls of escape routes
- Fire equipment like hose reel lying defunct
- Only one exit and entry point for escaping the emergency
- Detection devices like fire alarm missing

WHY BASEMENTS?

Some coaching centres are being run from basement with common entry and exit. Sources in the Fire Department said it was the responsibility of the Estate Office to stop misuse of basements. As per rules, basements cannot be used for holding classes. The Estate Office can resume the building in case of violation.

“We will hold a special fire safety drive for government schools, colleges and coaching centres. Action will be taken against violators and licences of coaching institutes cancelled in case of any violation.”

Manoj Singh Parida, IIT ADVISER

The Fire Department has been regularly carrying out surveys of buildings to check fire safety norms. Many notices have been issued to coaching centres. A fresh survey will be carried out soon.

KK Yadav, MC COMMISSIONER

The Fire Department has clearly turned a blind eye to coaching centres. We will take up this matter with the UT top brass.

CHANDIGARH PARENTS ASSN

28 PANCHKULA CENTRES RAILED, PUT ON NOTICE

In case of non-compliance, legal notice will be served on the institutes. The owners not adhering to bylaws may face jail for six months & penalty.

During checking in Sectors 4 to 12, A, 14 to 17, 20, 21, 25 and 26, hoses, reels and fire alarms were found missing.

Over 8,000 students studying at these coaching centres, most of them located in multi-storied showrooms or shops.

ERRING INSTITUTES

- Winning Age Institute
- Allen Career Institute
- Modern Academy
- Seema's Institute
- IBS Private Ltd
- Rachna Institute
- Arun Goel Physics Techniques
- Vidya Mandir Classes
- Chander Bansal Classes
- Shri Keshav School of Competition
- Indu Chemistry Classes
- Ashoka Copy House
- Sapra Classes
- Best Chemistry Centre
- Competition Zone
- Akash Institute

It's same for offices, markets

Even government offices, primarily of Punjab, cry for attention. A visit to one of the offices revealed that none of the floors had fire extinguishers while hose reels were disconnected. Right opposite the BSNL office, power cables,

CONTINUED ON PAGE 4

—SCENARIO OF CITY BEAUTIFUL—



A building in City housing the Coaching Centres.

There are around 400 coaching institutes are being operated in various markets. Sector 34 market, Sector 35 market, Sector 17, 20, 22, 24 market, Sector 8 market, NAC market in Manimajra, Sector 45 market and majority of them either found ill-equippeded or un-equippeded during fire safety audit conducted by the Fire and Emergency Services, Municipal Corporation, Chandigarh in the year-2019 and more than 350 Notices under **Delhi Fire Prevention and Fire Safety Act-1986** was served upon the Owners/Occupiers of the buildings who were found violating the Fire Safety norms to undertake the Fire & Life Safety measures suggested by the department to avoid the horrifying incidents like Surat Fire Tragedy.



OFFICIALS OF FIRE & EMERGENCY SERVICES, MCC INSPECTING THE COACHING CENTRES ALONGWITH SDM (CENTRAL) MS. NAZUK KUMAR

—FIRE SAFETY TIPS—

- Develop an escape plan for the building and ensure that everyone knows it.
- Always follow the Building By-laws to keep your building Safe & Secure.
- Set out Fire Alarm (Practice Manual Alarming System) and alert all in case of Fire.
- Practice moving through your escape routes with eyes closed during normal times.
- Always keep Escape/Evacuation Route clear of any blockades.
- Keep Storage and Working area free from trashes.
- Always maintain First Aid Kit and ready for any Emergency. Keep the First Aid Boxes in accessible locations.
- Keep Fire-extinguishers in working condition and learn how to operate them.
- Teach Students on Fire Safety Rules.
- Rush out of the Classroom without panicking and causing Stampedes.

—IN CASE OF FIRE—

- ❖ Protect yourself and your friends!-Stay Calm-Don't Panic.
- ❖ Raise Alarm and Alert Everyone.
- ❖ Use nearest EXIT routes.
- ❖ Close Doors and Windows behind you.
- ❖ Use Staircase, Not Lifts.
- ❖ Never stand up but always crawl low on the Ground and keep your face covered.
- ❖ Attract Attention of Rescue Team by loud noise.

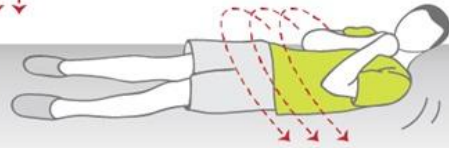
In case of Emergency Call 101, immediately

It is a Toll Free Number

—IN CASE ANYONE CAUGHT FIRE—

If your clothes catch on fire,

STOP | DROP | ROLL



**ALWAYS STOP, DROP AND ROLL OVER THE GROUND TO
PUT OFF FIRE.**

LEARN HOW TO OPERATE THE FIRE EXTINGUISHER

PASS

1 Pull
the pin



2 Aim at
the base
of the fire



3 Squeeze
the handle



4 Sweep
from side
to side



—WHAT TO DO IN CASE OF FIRE—

- ✓ If possible, close the door of the room, where the Fire is. Close all doors behind you as you leave. This will help delay the spread of fire and smoke.
- ✓ Before opening a closed door use the back of your hand to touch it and don't open if feel hot-the Fire will be on the other side.



- ✓ Get everyone out as quickly as possible. Don't try to pick up valuables. Make your way out, as safely as you can and try not to panic. It will help you to plan your escape route now rather than waiting until the Fire reaches you.
- ✓ Contact the Fire-Brigade. Clearly state the address of the Fire Spot.
- ✓ Never go back into the house until the Fire officer told you it is safe to do so.

—PLAN YOUR ESCAPE ROUTE—

In case of “Fire” in your building, would you know what to do?

- Draw a map of your building. Show every room door, and window and the location of Fire Safety Arrangements.
- Mark an easy way out of each room. Then find a second way out.
- Make sure everyone knows where to find door and window keys.
- The best escape route is your normal way in and out of your building so keep it clear. Think of difficulty you may have getting out, for example in the middle of the night. Choose a second escape; you will need to find a room to wait in until the Fire Service arrive.

—IN CASE ESCAPE ROUTE IS BLOCKED—

- ❖ Get everyone into one room, with a window that opens, and shut the door.
- ❖ Put cloths around the bottom of door to block out smoke.
- ❖ Open the window and call for help or Dial 101.

—WHAT NOT TO DO—

- Never stand up in a Fire, always crawl low under the smoke and try to keep your mouth covered with wet cloth or handkerchief.
- Never go back to a burning building for any reason.
- Teach students not to hide from Fireman.
- Don't secure open Fire and Smoke Check Doors as they limit the spread of Fire when in closed position.
- Don't be tempted to clutter the stairs, corridors and lobbies as they are your escape routes.
- Don't shout or run here and there. This tends to cause panic to others.

EVACUATION PROCEDURE

- 1** WHEN ALARM SOUNDS,
LEAVE IMMEDIATELY BY THE
NEAREST EXIT.
- 2** PROCEED IN AN ORDERLY
MANNER TO ASSEMBLY POINT.
- 3** REMAIN AT ASSEMBLY POINT
UNTIL ALL CLEAR IS GIVEN.

IN CASE OF FIRE

DIAL 101

OR CALL YOUR

NEAREST FIRE STATION



ISSUED IN PUBLIC INTEREST BY:-

**THE OFFICE OF CHIEF FIRE OFFICER
FIRE & EMERGENCY SERVICES,
CHANDIGARH**