

Boate Kiss Revisited

By Jaime A. Moncada

9 February 2023 - A new Netflix series on one of this century's deadliest fires is gripping but misses a key point: More needs to be done in Latin America to prevent these tragedies.



Partway through a new five-part Netflix dramatic series, “The Endless Night,” which chronicles the *Boate Kiss* Fire, a blaze that killed 242 people in a Brazilian nightclub in 2013, a police investigator makes an observation that had me shaking my head. “It is incredible these tragedies do not happen more often!” he observed.

In fact, these tragedies happen far more often than they should, in large part because bureaucrats and building developers dismiss better fire codes and accept the status quo. As someone with 35 years of experience as a fire protection engineer in Latin America, who visited the scene of the *Boate Kiss* Fire just days after the tragedy and wrote an investigation on the incident, I know firsthand that the tragedy was avoidable.

While the new Netflix series is compelling, and the families' drama in the wake of the tragedy is gut-wrenching, the discussion in the series about some of aspects of the fire—such as code compliance issues—was, in my view, misleading and misses the point. As we remember this fire on its 10-year anniversary, we must recognize that tragedies like the *Boate* Kiss Fire will keep happening in Latin America until adequate fire codes and enforcement are in place. In many countries in the developing world, however, this is still not the case.

The Kiss nightclub—or *Boate*, as nightclubs are called in Portuguese—was a one-story structure in the college town of Santa Maria in the southern part of Brazil. The tragedy that unfolded there on January 27, 2013 was almost identical to both the Cromañón nightclub fire in Buenos Aires that killed 194 people in 2004, and The Station nightclub fire in Rhode Island, where 100 people died in 2003. As with the Station fire, the Kiss *Boate* fire began when a pyrotechnics flare, set off as part of the show, ignited the expanded polyurethane being used near the stage for sound proofing. Someone quickly attempted to put out the fire with a nearby fire extinguisher, but it failed, and the fire quickly took off.



The fire moved very quickly through the interior of the club, rapidly consuming the available oxygen and leaving many surfaces with little more than scorch marks. Most of the victims died of smoke inhalation. PHOTO: Jaime Moncada

The *Boate* that night was overcrowded, full of college students, had no automatic fire sprinkler system, and only one functioning fire exit. Although many occupants saw the

developing fire and hastily moved towards the front door, they were held there by security guards, delaying their exit. Hundreds of occupants in other parts of the nightclub did not become aware of the fire until it was too late. The dance floor adjacent to where the band was playing filled with smoke in less than two minutes after ignition of the polyurethane. Expanded polyurethane, under pyrolysis, releases hydrogen cyanide (HCN) which is extremely lethal. Forensic studies found that HCN was the leading cause of death for the fire victims of the Boate Kiss incident.

Numerous things could have gone differently on the night of the fire had the local fire code in Santa Maria been adequate. Instead, oversights in the code left plan reviewers and fire inspectors without any of the tools needed to keep occupants safe.

We know, for instance, that the nightclub was overcrowded, had only one functioning exit, did not have automatic sprinklers, had polyurethane foam without any fire retardants, and was using pyrotechnics. Except for the overcrowding, none of these conditions were violations in Santa Maria's local regulations, despite being contrary to the requirements in NFPA codes and standards. In my view, it is unfair to hold the municipal code enforcers responsible, because without the necessary fire safety requirements established in the local codes, these officials simply did not have the tools to change these hazardous conditions.

A lack of adequate safety regulations is a problem throughout South America and is a big reason why the *Boate Kiss* fire is not an outlier, despite the investigator's assertions in the Netflix series. In fact, the *Boate Kiss* is just one in a series of large fires that have struck the region in recent years. Latin American fires account for five of the 10 largest-loss-of-life structural fires in the world since 2000. Part of the problem is the region's swift development, and its rush to mirror the architecture of the developed world without having the fire safety codes in place to prevent these new buildings from becoming fire traps.

In the decade since the *Boate Kiss* fire, there have been a fair amount of fire code updates in Brazil. As in the US, every state in Brazil is free to adopt its own building and fire codes, but in recent years there has been a move to better standardize requirements between jurisdictions. This includes new requirements on interior combustible finishes and pyrotechnics use in nightclubs. However, issues with fire inspections and limited requirements for sprinkler protection continue to be problems in the country.

NIGHTCLUB FIRES IN LATIN AMERICA (2000-2023)				
NIGHTCLUB	CITY	COUNTRY	DATE	DEATHS
Boate Kiss	Santa Maria	Brazil	27-Jan-13	242
Disco Factory	Quito	Ecuador	19-Apr-08	19
Disco Cromañón	Buenos Aires	Argentina	30-Dec-04	194
Club La Guajira	Caracas	Venezuela	1-Dec-02	47
Disco Utopia	Lima	Peru	20-Jul-02	29
Disco Lobohombo	Mexico City	Mexico	21-Oct-00	22

List compiled by Jaime A. Moncada from published reports (Jan 26 2023)

Other countries—including Costa Rica, Colombia, Dominican Republic, Ecuador, and Panama—have also made some moves to improve their fire codes. However, the occurrence of large and deadly fires in Latin America will not truly be solved until every country updates its fire safety codes. This is where I think that NFPA codes and standards could be very useful in the developing world.

Although NFPA codes and standards are generally developed in the United States, their clarity, common sense, and technical extraction make them useful in any country. There are people I've spoken to who say that these standards are very "American," but this argument misses the point. Fires don't obey geographic borders, culture, language, or nationality. Fires obey physics and chemistry, which is the same in all countries. Adapting NFPA codes and standards to the reality of the developing world is the fastest and most effective way to address the fire problem and make sure that huge loss-of-life incidents like the *Boate Kiss* Fire don't continue to happen throughout the region.

My original report about the *Boate Kiss* Fire, which I wrote after visiting the site just days after the incident, was published in June 2013 in the Spanish and Portuguese editions of NFPA Journal. The report has since been updated, and I encourage you to give it a read, especially if you plan on watching the new Netflix series.

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Top photograph: Getty Images

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