Did History Actually Teach Us Anything?   Episode 2: Great London Smog 1952

Laura:
Welcome to Did History Actually Teach Us Anything? . The podcast where we unravel the most well-known tales of calamity, mishap, and unforeseen consequences that have shaped the course of history. And consider whether we've actually learned anything from them all these years later. In this podcast, we examine the historical events that you may think you know about already and the causes that led to them, be they icebergs or baker s ovens.
We will consider whether these tragedies could have been avoided, and some of the surprising things we do differently now as a result.
But this podcast, isn't just about dates and events. It's about learning from the past, drawing insights from hindsight, and gaining a deeper appreciation for the complexities of what really happened in these events we think we know so well. So, get ready to encounter remarkable individuals, pivotal moments and fascinating insights that will make you appreciate health and safety and environmental management as far more than just red tape.
In December 1952, London was engulfed by a deadly smog that wreaked havoc on its residents. Lasting for 4 harrowing days, the Great London Smog claimed the lives of approximately 12,000 people and left thousands more suffering from illness.
Join us as we dive into the gripping narrative of this environmental disaster, exploring the impact it had on the city and its inhabitants. We'll uncover the events that led to this catastrophic smog and examine the lasting repercussions it left on the community. Joining us is John, who will first tell us what actually happened in the great London smog of 1952.

John Binns:
The Great Smog, 1952 was a severe air pollution event that occurred in London, and is probably the deadliest environmental disaster in the city's history. The smog, a combination of fog and air pollution, lasted for several days and had devastating health impacts on the population.
People in London would have been used to smog at the time, as there were many incidents over the years. Consider the smoggy, dark scenes from Jack the Ripper stories you have seen on TV.
Charles Dickens wrote in the novel, Our Mutual Friends, It was a foggy day in London and the fog was heavy and dark. Animate London, with smarting eyes and irritated lungs, was blinking, wheezing and choking. Inanimate London was a sooty spectre, divided in purpose between being visible and invisible, and so being wholly neither.
And the famous impressionist painter, Claude Monet, would even visit London to paint the change in light patterns caused by the smog over the Thames.
This smog was, however, an extremely bad incident. The Great Smog occurred from the 5th of December to the 9th of December 1952.
During this period, a high-pressure weather system trapped cold air under a layer of warm air, preventing the dispersion of pollutants. The resulting stagnant air allowed a thick layer of smog to form over the city.
Imagine looking out the window in your home and only being able to see a few centimetres in front of you. Public transport vehicles had to be led by people with flares so that they could be seen.
The primary cause of the smog was emissions from the burning of coal for heating and industrial purposes.
The stagnant weather conditions prevented the dispersal of these pollutants.
The smog was a dense and yellowish fog that enveloped the city and was so bad that people would go to the cinema and they could not see the screen, as the smog managed to enter into the building, so they simply had to go home.
The combination of fog and pollutants created a toxic and hazardous atmospheric condition.
Improvised gas masks were made by soaking sacking in whiskey, which were wrapped around the nostrils of cattle at the Smithfield livestock show. Unfortunately, many cattle laid down to rest and never got up again.
The event, however, did lead to change, with the introduction of a law to reduce such pollution, known as the Clean Air Act.

Laura:

So John, what were the health effects of the smog?

John Binns:
In short, severe.
The pollutants in the air, including sulphur dioxide and particulate matter, caused respiratory problems, aggravated existing health conditions, and led to a significant increase in hospital admissions. The elderly and individuals with pre-existing respiratory conditions were particularly vulnerable.
The mortality rate spiked during the smog episode. It is estimated that thousands of people died prematurely due to the health effects of the polluted air. The exact number of fatalities remains a subject of debate, but estimates suggest that the death toll was likely to be in the range of several thousand. There were so many deaths that undertakers suffered with a backlog of corpses for many weeks. The Great Smog had a lasting impact on public awareness of air quality issues. It contributed to a global recognition of the dangers of air pollution and served as a catalyst for environmental legislation and initiatives to improve air quality in urban areas.

Laura:
So what were the causes of the smog?

John Binns:
The predominant cause of the smog was the widespread use of coal for heating homes and powering industries.
Coal was a primary source of energy in post war London, and its combustion released large amounts of pollutants into the air.
The high levels of sulphur dioxide emitted during the burning of coal contributed to the acidity of the smog and its harmful effects on respiratory health.
Particulate matter such as soot contributed to the dense and opaque appearance of the smog and had adverse health effects when inhaled.
The post war period saw an increase in coal consumption due to the reconstruction efforts and the demand for energy.
The reliance on coal as a cheap and abundant energy source exacerbated air pollution in urban areas.
At the time of the Great Smog, there were few regulations in place to control emissions from industrial activities and domestic coal burning.
The absence of strict air quality standards allowed for unrestricted release of pollutants into the atmosphere.
Domestic heating practices, such as the burning of coal in residential areas, contributed significantly to the pollution.
Many households used coal burning stoves for heating, releasing pollutants directly into the local atmosphere without control.
As I mentioned earlier, weather conditions during the episode were characterized by a high-pressure system that led to a temperature inversion.
In a temperature inversion, a layer of warm air traps a layer of cooler air near the ground.
This prevented the upward dispersion of pollutants, creating stagnant air and allowing the smog to accumulate.
Finally, there was limited awareness of the health risks associated with air pollution at this time.

Laura:
John, why was the event so serious?

John Binns:
The population and authorities were not fully aware of the dangers posed by the combination of pollutants, leading to a lack of preparedness for such an environmental disaster. The city lacked adequate emergency response plans to address the severe air pollution episode.
The absence of measures to protect public health during such events contributed to the high mortality rates and widespread health issues seen during the incident.

Laura:
Is there any way that the smog could have been avoided?

John Binns:
The Great London Smog was a complex environmental event with multiple contributing factors, and while complete avoidance might have been challenging, several measures could have been implemented to mitigate the severity of the smog and reduce its impact. First of all, a gradual transition from coal to cleaner fuels, such as natural gas or electricity, could have significantly reduced the emissions of sulphur dioxide and particulate matter. However, this transition would have required infrastructure development and policy initiatives to encourage the adoption of cleaner energy sources.

Developing and enforcing strict regulations on industrial emissions and domestic coal burning could have limited the amount of pollutants released into the air. The introduction of emission standards and smoke control areas might have helped significantly control air pollution in urban areas.

Expanding on this, industrial facilities could have implemented cleaner production methods and technologies to reduce the release of pollutants. This might include the use of cleaner burning fuels, the installation of pollution control devices, and improved industrial processes. Developing and implementing early warning systems for air quality could have also provided authorities with the information needed to take preventative measures during adverse weather conditions. Timely alerts could have led to the implementation of emergency response plans and the temporary closure of industrial facilities. Likewise, urban planning measures such as zoning regulations that separate industrial areas from residential neighbourhoods may have reduced the exposure of population to the smog. This would involve strategic city planning to minimize the impact of pollution on public health.

Increased investment in research on air quality and pollution control technologies could have led to the development of innovative solutions, including advancements in cleaner energy production, improved combustion technologies, and more effective pollution control devices.

Having well defined emergency response plans in place could have mitigated the immediate health impacts of the smog. These plans might include public health advisories, temporary closure of schools and businesses, in addition to raising public awareness about the health risks associated with the smog and the importance of using cleaner energy sources could have led to change in individual behaviours. Educating the public on the proper use of coal and the benefits of transitioning to cleaner alternatives would have resulted in reduced emissions. Promoting and investing in public transportation systems could have reduced reliance on private vehicles and consequently lowered emissions from traffic. Enhanced public transportation infrastructure might have contributed to better air quality in London and other urban areas.

Laura:
Finally, John. What were the lessons learned from the smog? And what do we do differently now as a result?

John Binns:
The Great London Smog in 1952 had a profound and lasting effect on public awareness, environmental policies and public health. The event served as a catalyst for significant changes and improvements in several areas.

One of the most notable outcomes of the smog was the introduction of the Clean Air Act 1956. The Act was a comprehensive piece of legislation aimed at addressing air pollution in the United Kingdom. The only good thing to come out of the smog is that it led to a significant drive to improve and introduce air pollution legislation.

This means that air quality has improved significantly since the 1950s and we no longer need to worry about having masks for cows. It empowered local authorities to regulate industrial emissions, introduced smoke control areas and set standards for domestic and industrial fuel use. In addition, the Clean Air Act established emission standards for industrial facilities and introduced regulations to control emissions from domestic sources.

This marked a crucial step in regulating air quality and reducing the release of pollutants into the atmosphere. The Act also designated specific areas known as smoke control areas where only smokeless fuels or cleaner burning alternatives could be used. Consequently, the incident spurred

technological innovations in pollution control devices and cleaner energy production.

Efforts were made to develop technologies that could reduce emissions from industrial processes and enhance overall air quality. Additionally, the event prompted a re-evaluation of emergency response procedures during episodes of severe air pollution. Authorities developed more effective emergency response plans.

The Great Smog raised public awareness about the dangers of air pollution and its impacts on health. It led to educational campaigns and initiatives to inform the public about the importance of clean air and the risk associated with deleterious practices such as coal burning.

As a result, the smog prompted a shift away from the widespread use of coal for heating and energy. There was a transition to cleaner fuels such as natural gas and electricity which contributed to a reduction in air pollution in London and other urban areas in the UK and beyond. Furthermore, the smog drew attention to the transboundary nature of air pollution, leading to increased cooperation on environmental issues.

Collaborative efforts were initiated to address cross border pollution and share best practices in pollution control. The Great Smog had a lasting impact on public attitudes towards environmental issues, as it contributed to a cultural shift, with increased emphasis on environmental consciousness, sustainable practices, and the recognition of the importance of clean air.

Laura:

Thanks for joining us on this episode of "Did History Actually Teach Us Anything?". If you enjoyed this episode, please follow our social media channels, leave us a rating and review, and share our podcast with anyone who wants to learn more about the risky side of history.

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