### Incinerator emissions and elevated infant mortality rates

by Michael Ryan BSc, C Eng, MICE

Before reading further, think about the late Dr William Brend (1872-1944), who demonstrated beyond any reasonable doubt that air pollution, not poverty, was causing higher infant death rates in his "Health and The State" (Constable 1917). He was a barrister as well as a medically-qualified doctor and concerned that mothers might be wrongly suspected of having killed their babies. His work is still ignored and studies continue to adjust infant mortality rates for deprivation, ethnicity, and socioeconomic status – thereby obscuring the truth.

Here's such a study, the promise of which was first reported in the Sunday Express of 1 May 2011 following Mark Metcalf's articles in Big Issue in the North that were rightly critical of the former Health Protection Agency (HPA). The HPA had promised in August 2003 to check health data around incinerators and landfill sites due to residents' concerns. The HPA either ignored or failed to check ONS data to see whether or not their opinion that exposure to incinerator emissions wasn't linked to higher rates of infant mortality was correct.

"Researchers have found no link between exposure to emissions from municipal waste incinerators (MWIs) and infant deaths or reduced foetal growth."

 $\frac{https://www.imperial.ac.uk/news/191653/major-study-finds-conclusive-links-health/\#:\sim:text=Researchers\%20have\%20found\%20no\%20link,deaths\%20or\%20reduced\%20foetal\%20growth.$ 

Foetal growth, stillbirth, infant mortality and other birth outcomes near UK municipal waste incinerators; retrospective population based cohort and case-control study <a href="Environment International Volume 122">Environment International Volume 122</a>, January 2019, Pages 151-158

https://www.sciencedirect.com/science/article/pii/S0160412018316398

https://www.express.co.uk/news/uk/243962/Are-rubbish-incinerators-killing-our-children

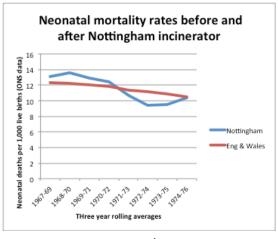
It's possible that the late William Whitlock MP was concerned about emissions from the Eastcroft incinerator in Nottingham affecting the neonatal mortality rate. His parliamentary question covers years either side of the incinerator starting in 1972.

Mr. Whitlock asked the Secretary of State for Social Services what have been the figures of early neo-natal and neonatal infant mortality in Nottingham in each of the last 10 years; how these figures compare with the national figures;

Infant and Perinatal Mortality (HC Deb 09 February 1978 vol 943 cc668-9W)

http://hansard.millbanksystems.com/written answers/1978/feb/09/infant-and-perinatal-mortality-1

The data released by ONS in 1978 enabled me to make this graph showing a sudden reversal in the falling neonatal mortality rates after the Eastcroft incinerator started operating:



Public Health England part-funded a study to investigate whether infant death rates rise after municipal waste incinerators (MWIs) started operating.

That study: "Bayesian spatial modelling for quasi-experimental designs: An interrupted time series study of the opening of Municipal Waste Incinerators in relation to infant mortality and sex ratio" (Environment International Volume 128, July 2019, Pages 109-115) concluded:

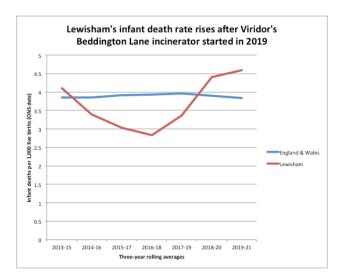
"Based on our approach, we do not find evidence of an association of MWI opening with changes in risks of infant mortality or sex ratio in comparison with control areas."

# https://www.sciencedirect.com/science/article/pii/S0160412018326060

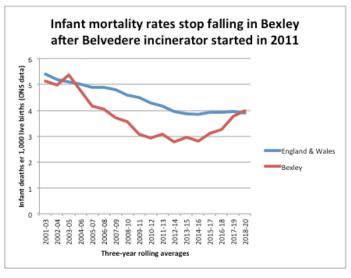
A total of forty-six infant deaths were recorded by the Office for National Statistics (ONS) in the eight councils where the incinerators are sited in the years that the incinerators started operating. Seventy infant deaths were recorded by ONS in the following year; 63 in the next year and 74 in the next.

The above study suggests that infant death rates don't rise after incinerators start operating and yet ONS data show the exact opposite.

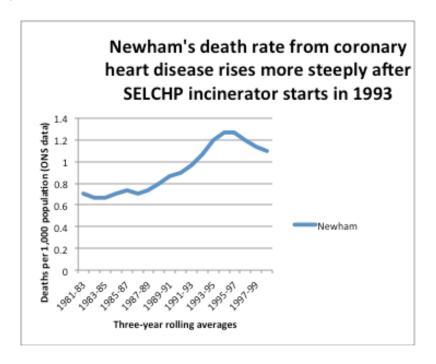
The infant death rate in Lewisham, which is downwind of Beddington Lane with southwesterly winds, rose after the Beddington Lane incinerator started in 2019.



Bexley's infant death rate rose after the RRRL incinerator in Belvedere started in 2011.



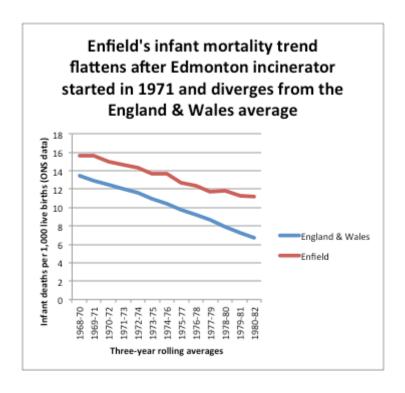
The post-incinerator worsening of infant mortality rates in Councils exposed to emissions aren't a very long series of chance events. The trends must have been observed by those paid to protect public health and yet no action has apparently been taken to prevent further loss of life. It's not only babies who are at risk:

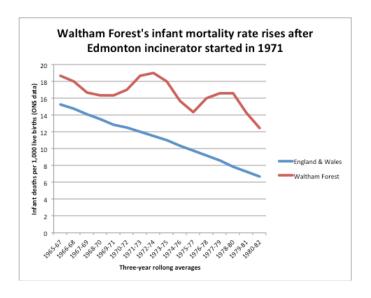


In December 2012, ONS released the infant mortality rates in each of the London Boroughs from 1970-2010, which enabled me to plot the following graph showing the opposite of the conclusion of the above 2019 study:

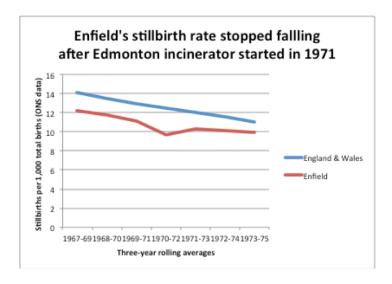
#### http://ukhr.eu/incineration/selchp.htm

ONS released London Borough infant mortality data from 1965-69, which showed that infant death rates rose in the Boroughs of Enfield and Waltham Forest after Edmonton incinerator started in 1971.

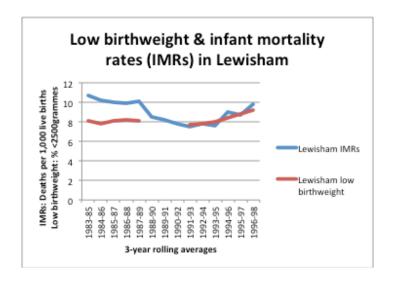


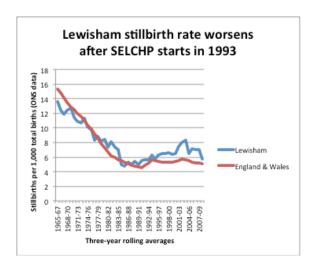


Further FoI requests led to the release of the stillbirth rates for all London Boroughs from 1965-2010 and the percentages of low birthweight babies (singleton live births less than 2,500 grammes) from 1983-2010. These data showed that stillbirth rates in Enfield and Waltham Forest rose after Edmonton started operating.



The rates of stillbirths and also the percentages of low birthweight babies rose in the Boroughs of Lewisham, Newham and Tower Hamlets after the SELCHP incinerator started operating in 1993.





Here's a graph of an earlier incinerator where the upward trend in infant death rates seemed to have escaped the attention of Kirklees Council in the late 1970s and 1980s.



In 2009, Kirklees Council were keen to threaten anti-incinerator group DISC who'd shown a slide of an electoral ward map with elevated infant death rates (2003-2005 ONS data) in electoral wards downwind of the Kirklees incinerator.

# https://www.thenorthernecho.co.uk/news/4472880.legal-threats-waste-dispute/

The same map had been shown by me at a public meeting at Costessey High School, Norwich in January 2007 and also reproduced in Dorking Advertiser incinerator articles of 10<sup>th</sup> and 17<sup>th</sup> January 2008. The latter Dorking Advertiser article's headline was "If it was dangerous it wouldn't be built, say incinerator bosses".

Here's a later electoral ward map of Kirklees (2004-2008 ONS data):

#### http://www.ukhr.eu/incineration/kirklees.pdf

Kirklees Council declined to give comment to the Huddersfield Examiner for this article of February 2017.

 $\frac{https://www.examinerlive.co.uk/news/west-yorkshire-news/air-pollution-linked-kirklees-baby-12615235$ 

I'd like to acknowledge the ongoing support of Mark Metcalf and Big Issue North in exposing this sickening scandal, which those paid to protect public health for the last fifty-plus years could and should have prevented.

\*\*\*\*\*\*End\*\*\*\*\*