

As the Opioid Overdose Epidemic Intensifies Are We Prepared? A Review of Hampton Roads Virginia

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Introduction

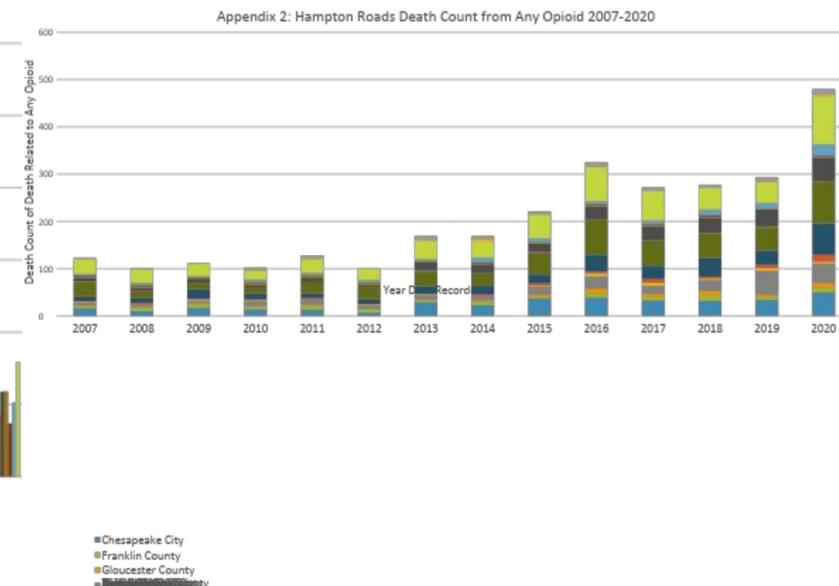
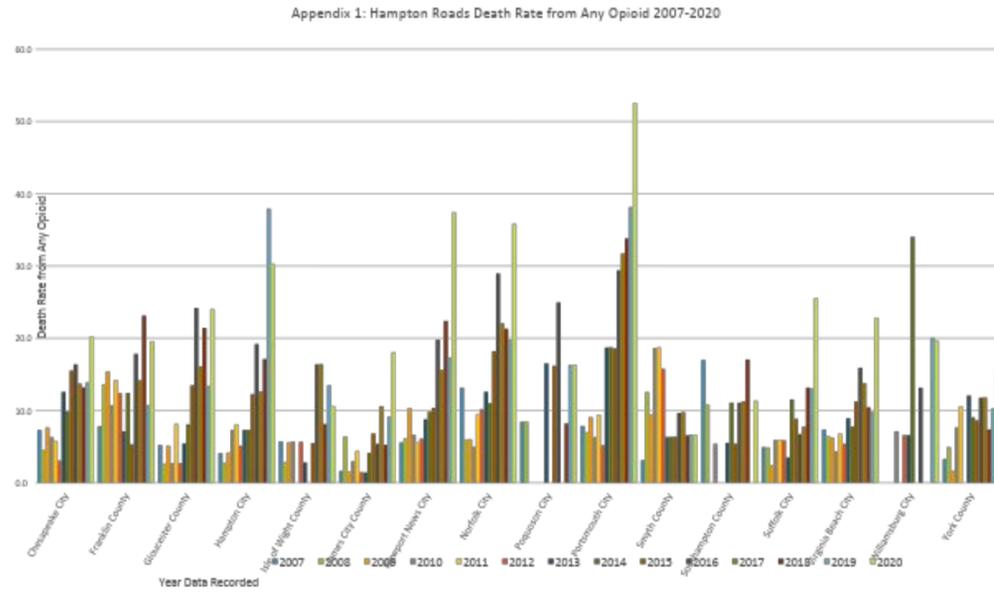
- According to the CDC, between 1999-2020 the national opioid involved overdose deaths total has increased from ~8,000 to ~68,630 respectively. This represents a ~858% increase and is expected to continue to increase.¹
- Of the total drug ((non)synthetic) involved overdose deaths in 2020 (~91,799), Fentanyl was the primary cause of ~60,000 deaths, which is ~65% of the total drug involved death count.¹
- In the state of Virginia, deaths attributed to opioid involved, have increased from ~1078 in 2016 to ~1478 in 2020 a ~137% increase.²
- In the Hampton Roads area, deaths have increased from a rate of ~11/100,000 in 2015 to ~20/100,000 in 2020.²
- Naloxone use/distribution has been identified as a significant strategy to combat the epidemic.³ Do we know how much distribution is enough to be considered adequate either by population size or area?

Methods

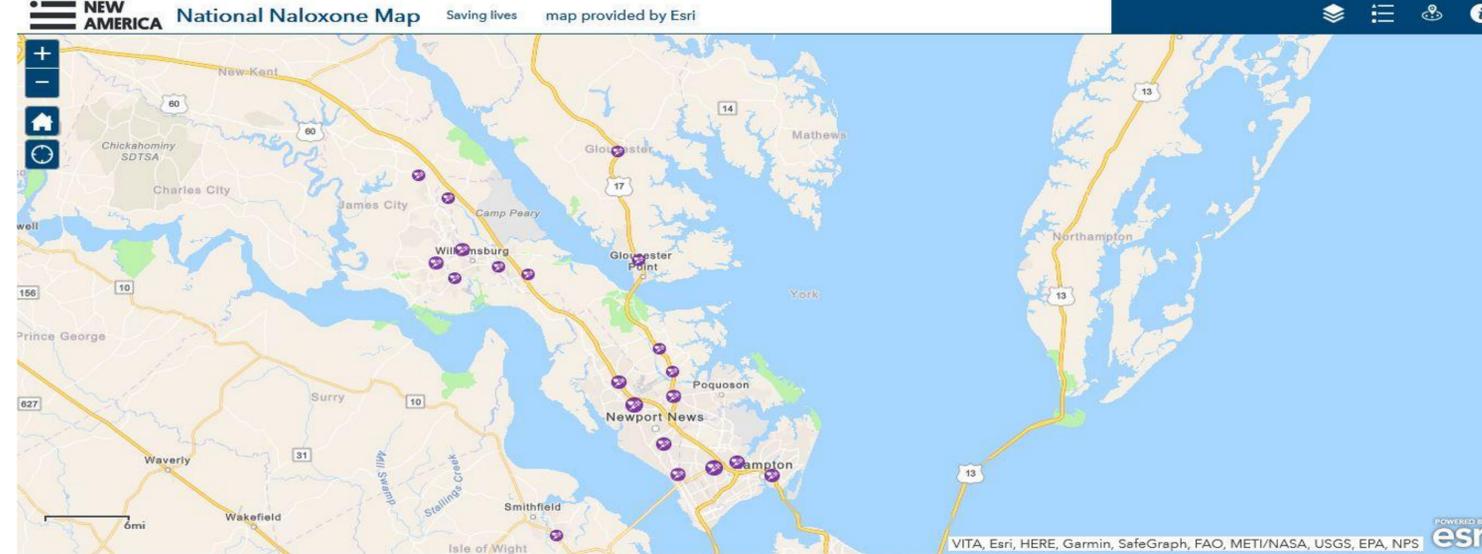
- Review of CDC materials related to the Opioid Epidemic.
- Extract state, county, and city level data of opioid related death counts from 2007-2020.
- Review of literature related to drug overdose mitigation strategies including distribution.
- Review of Hampton Roads Naloxone distribution pharmacies using the National Naloxone Map.⁴

Results

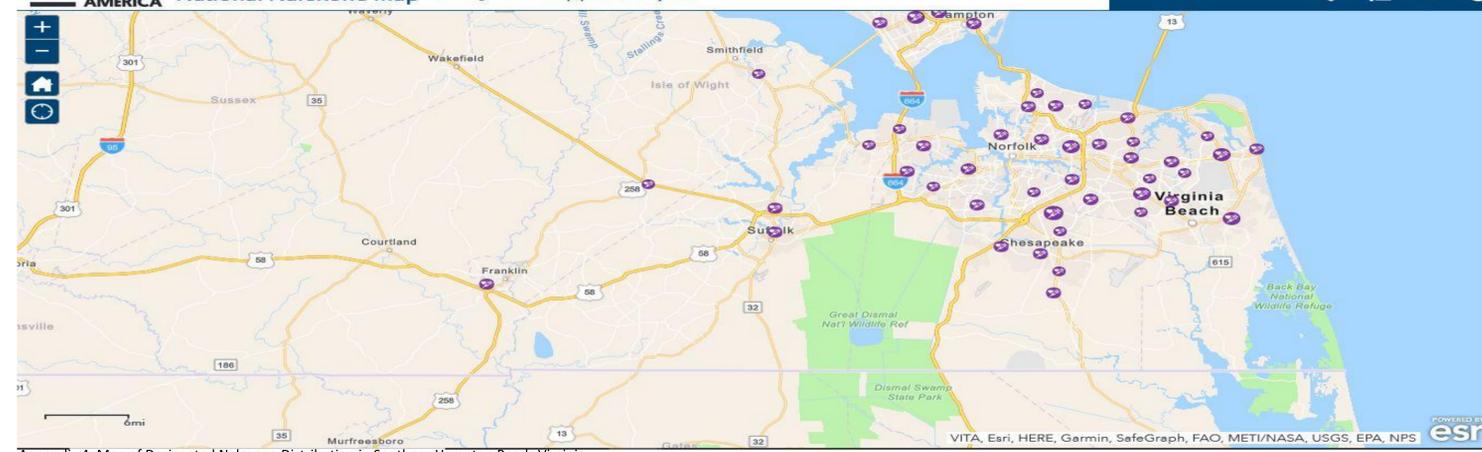
- Data about opioid overdose deaths attributed to “Any Opioid” suggests an increasing trend.⁵ Refer to Appendix 1-2.
- Standing order in Virginia to increase access by distributing Naloxone free of charge in the state at designated pharmacies, Community Service Boards, treatment facilities or via prescription. Refer to Appendix 3-4.
- Establishment of REVIVE! through the Opioid Overdose and Naloxone Education (OONE) program for the Commonwealth of Virginia. Which includes Naloxone distribution, and training for law enforcement, emergency services and “lay rescuers.”⁶



Appendix 3: Map of Designated Naloxone Distribution in Northern Hampton Roads Virginia



Appendix 4: Map of Designated Naloxone Distribution in Southern Hampton Roads Virginia



Conclusion

- Although Virginia has made significant strides in trying to curb the opioid epidemic, more research needs to be conducted to understand and or quantify how much Naloxone distribution would be considered adequate either by population size or area. Our recommendation would be for research focused on developing a model that could be used regardless of location and population size. This model would help advise public health officials on how Naloxone distribution should be managed. According to a “first of its kind” assessment published in 2022, Naloxone distribution to achieve 80% death aversion would require varying numbers of kit distributions per 100,000 people.⁷ For example, according to their model applied in Massachusetts, 740 Naloxone kits per 100,000 people would be considered adequate.⁷

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References

1. National Institute on Drug Abuse. Overdose Death Rates. Published January 20, 2022. <https://nida.nih.gov/drug-topics/trends-statistics/overdose-death-rates>
2. Virginia Department of Health. Overdose Deaths – Opioid Data. Virginia.gov. Published 2018. <https://www.vdh.virginia.gov/opioid-data/deaths/>
3. Opioid Overdose Prevention Toolkit | SAMHSA Publications. Samhsa.gov. Published 2018. <https://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA18-4742>
4. Substance Abuse & Mental Health Services Administration. Opioid Overdose Prevention Toolkit | SAMHSA Publications. Samhsa.gov. Published 2018. <https://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA18-4742>
5. New America. National Naloxone Map. Map Provided by ESRI ArcGIS Web Application. www.arcgis.com. Accessed March 15, 2022. <https://www.arcgis.com/apps/webappviewer/index.html?id=153b0c32fefc432eae6a0e8439b9f56b>
6. Virginia Department of Health. Fatal Drug Overdose Trends – Opioids (All). Forensic Epidemiology – Medical Examiner. Virginia.gov. Published 2020. <https://www.vdh.virginia.gov/medical-examiner/forensic-epidemiology/>
7. Irvine MA, Oller D, Boggis J, et al. Estimating naloxone need in the USA across fentanyl, heroin, and prescription opioid epidemics: a modelling study. The Lancet Public Health. 2022;7(3). doi:10.1016/S2468-2667(21)00304-2

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