USING DATA AND EVIDENCE TO PROMOTE CHANGE: BUILDING COALITIONS FOR RECOVERY

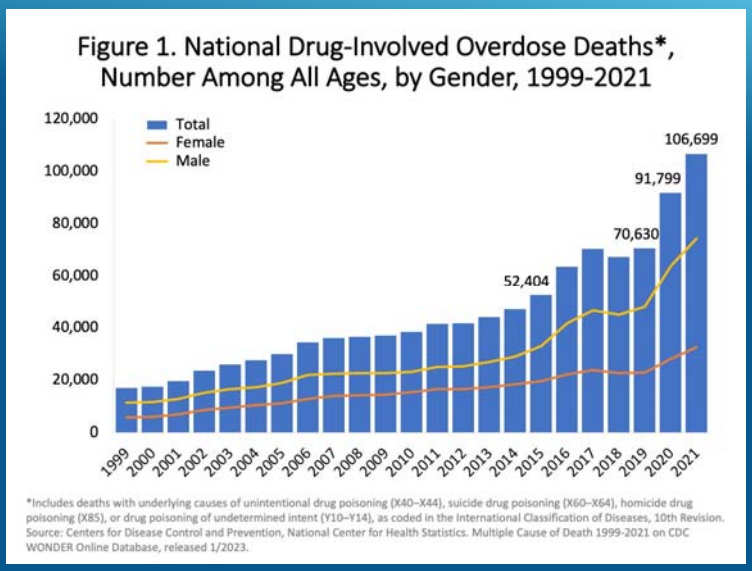
Chesterfield Fire and EMS

1

CHESTERFIELD COUNTY

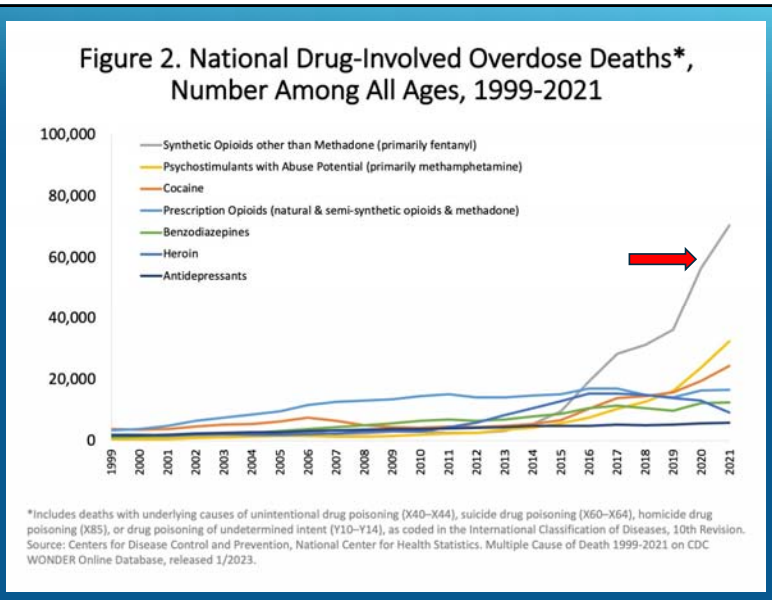
- Chesterfield County
  - Population 381K
  - Weldon Cooper Center for Public Service at the University of Virginia report indicates Chesterfield County fastest growing locality
  - Career Fire and EMS department
    - By 2024, 600+ uniformed personnel

2



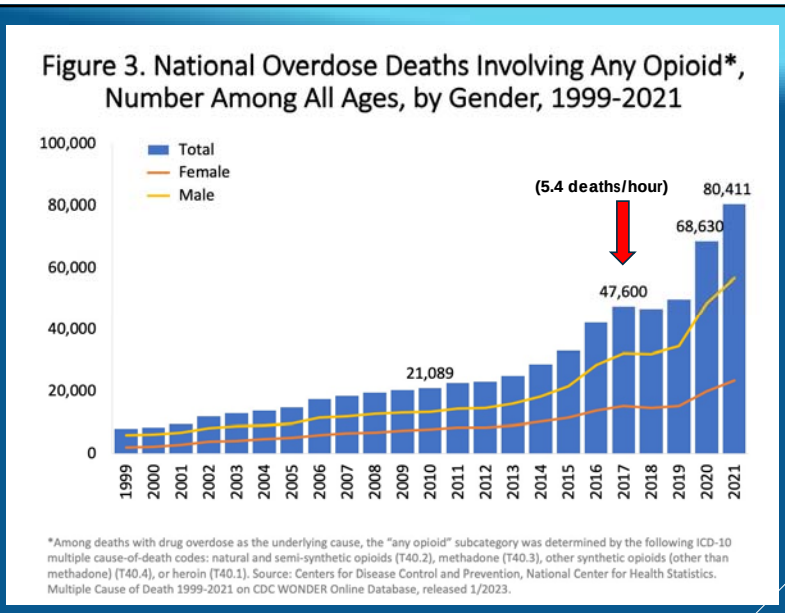
NATIONAL TREND – ALL OD DEATHS

3



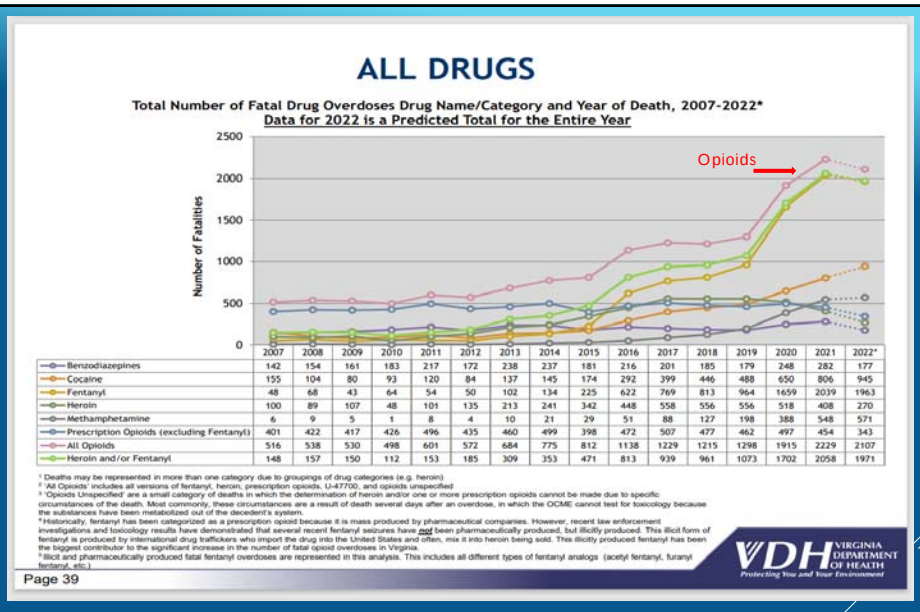
NATIONAL OD DEATHS BY TYPE

4



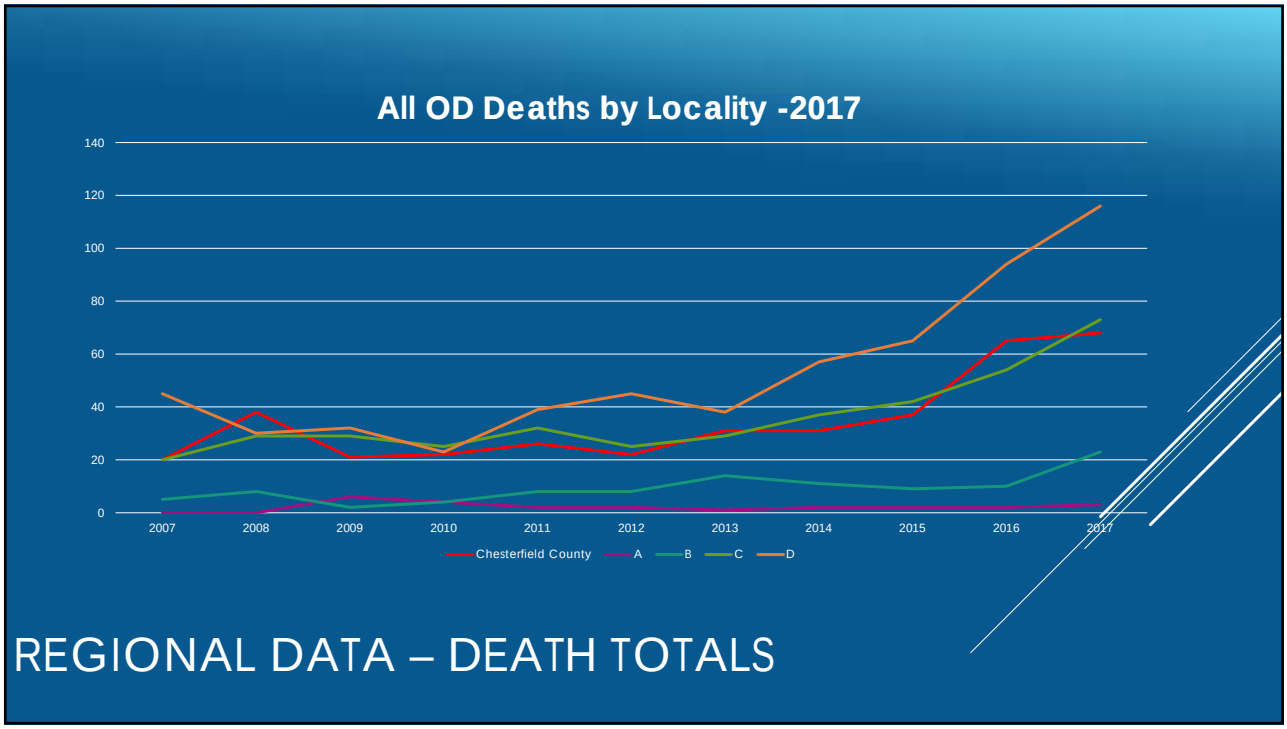
NATIONAL OPIOID OD DEATHS

5



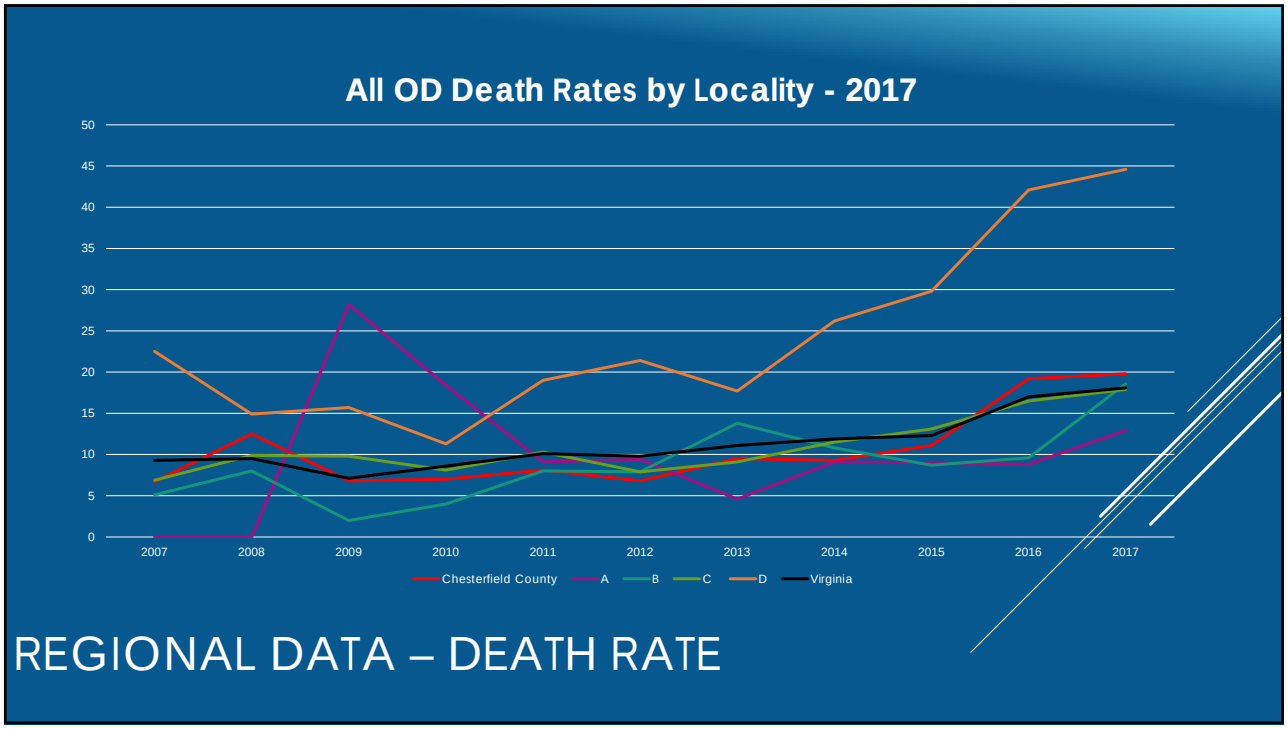
STATE LEVEL DATA - VIRGINIA

6



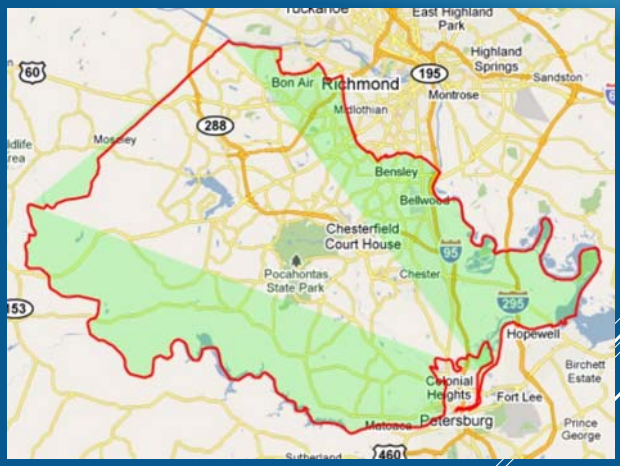
REGIONAL DATA – DEATH TOTALS

7



REGIONAL DATA – DEATH RATE

8



CHESTERFIELD COUNTY DATA

9

- **68% of 12th graders have tried alcohol**
- **37.4% of 12th graders drank in the last month**
- **23.5% of 10th graders drank in the last month**

- **Among high schoolers, within the month they were surveyed**
  - **35% drank some alcohol**
  - **21% binge drank (consuming an excessive amount)**
  - **22% rode in someone's car who'd been drinking**
  - **10% drove after drinking**

HIGH SCHOOL ALCOHOL – 2017 AND PRIOR

10

- Marijuana use
  - 35.1% of 12th graders have smoked pot in the past year
  - 21.3% of 12th graders have smoked pot in the last 30 days
  - 16.6% of 10th graders have smoked pot in the last 30 days
  - 6% of 12th graders say they use marijuana every day
  - 81% of 12th graders say it would be easy to get marijuana
  - Only 32% of 12th graders feel that regular marijuana use is harmful

HIGH SCHOOL MARIJUANA - 2017 AND PRIOR

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- Nearly 44% of high school students know a classmate who sells drugs. When asked which drugs are sold
  - 91% said marijuana
  - 24% said prescription drugs
  - 9% said cocaine
  - 7% said ecstasy

ILLICIT DRUG IN HIGH SCHOOLS - 2017 AND PRIOR

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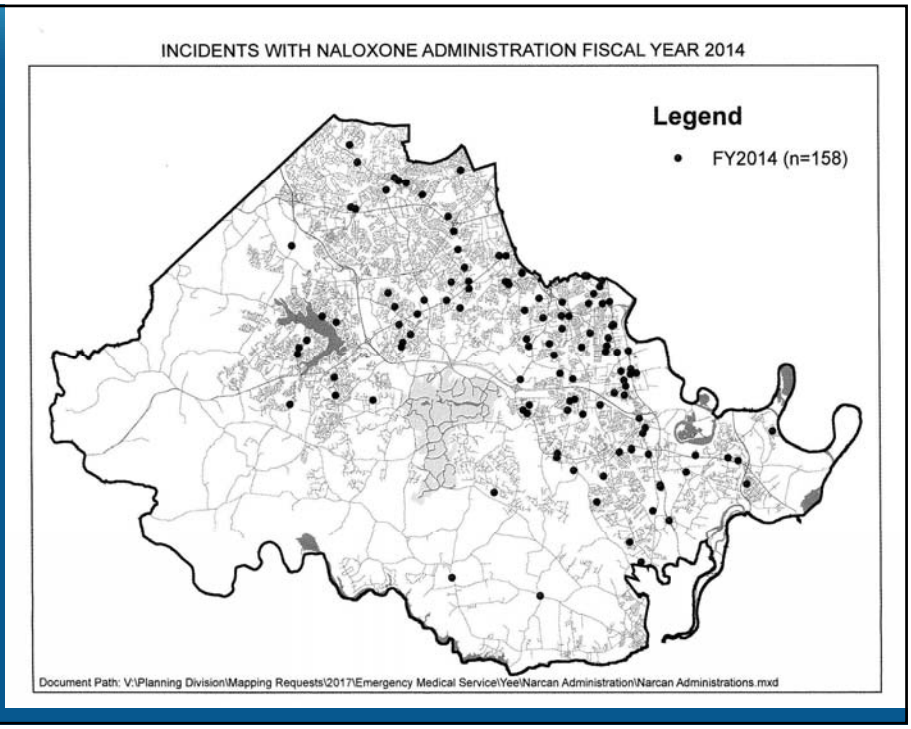
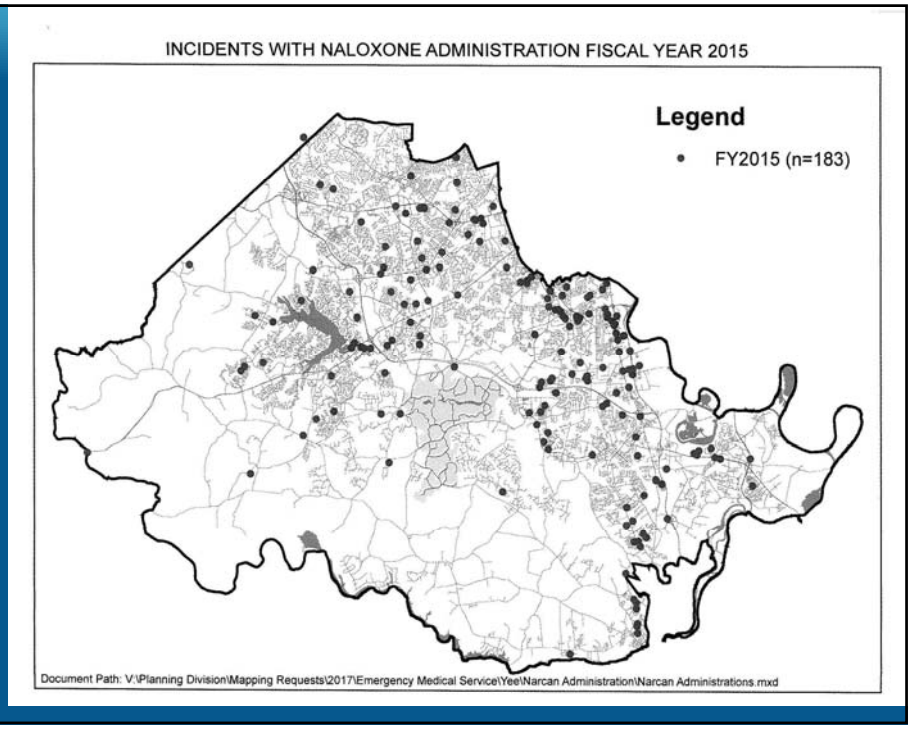
911 CALLS FOR SERVICE (NARCAN DATA)



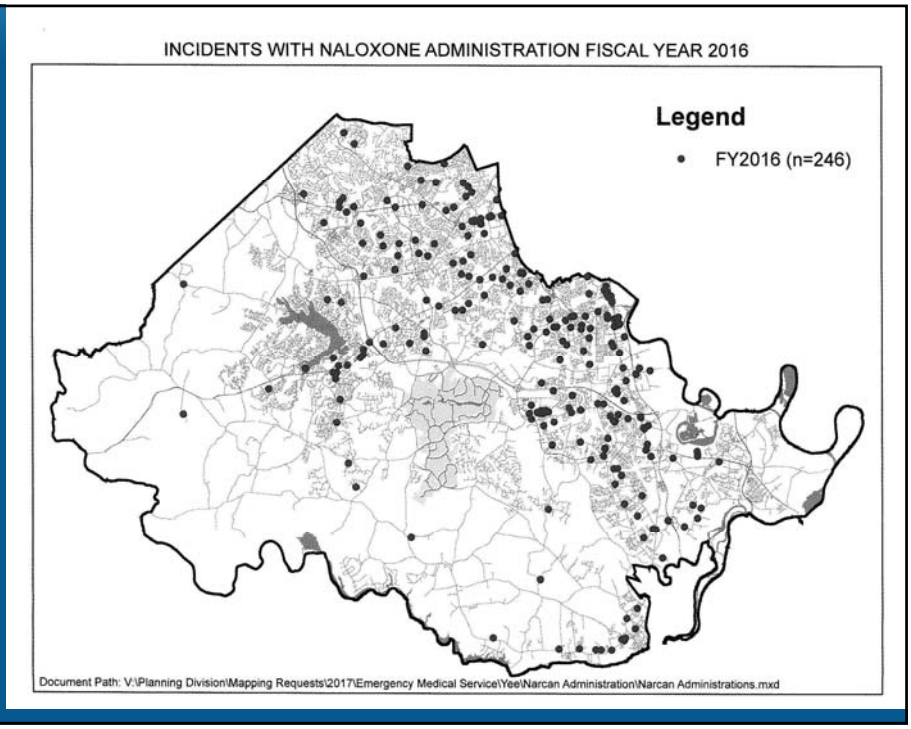
13

911 CALLS FOR SERVICE (NARCAN DATA)



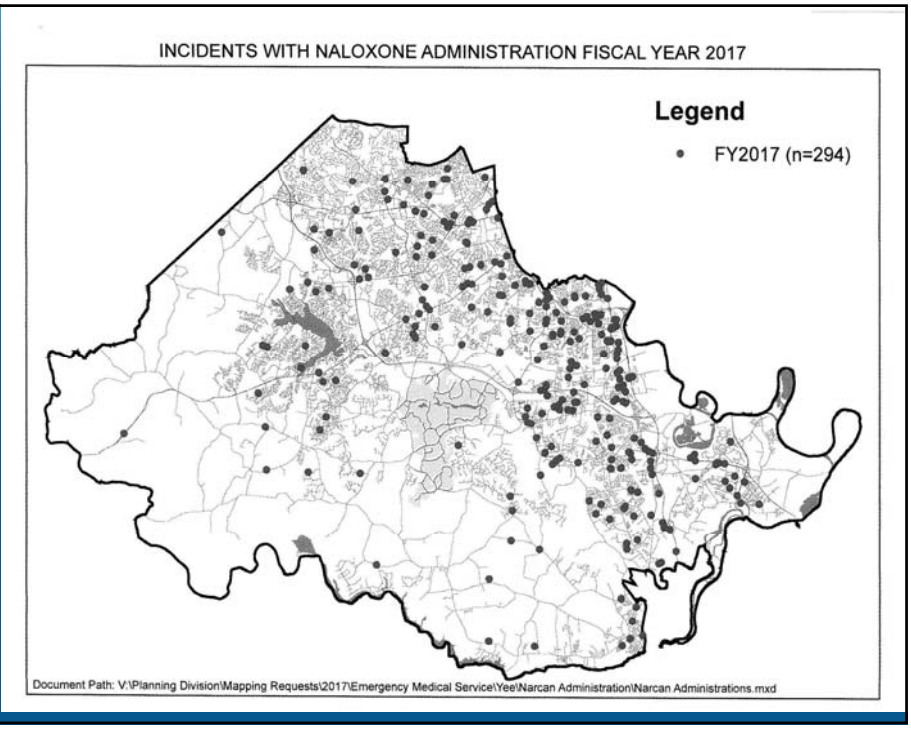
14

911 CALLS FOR SERVICE (NARCAN DATA)



15

911 CALLS FOR SERVICE (NARCAN DATA)



16

- Changes in drug supply…Fentanyl is in everything and is leading to many more deaths.
- Pandemic-era increases in loneliness, isolation, secrecy, lack of connection.
- Increased stress, job loss, pandemic-related illnesses and deaths.
- Loss of treatment options derailed recovery efforts of many.

WHAT'S DRIVING THE INCREASE?

17

NOW WE KNOW THERE IS A PROBLEM WHAT DO WE DO NEXT?

18

CHESTERFIELD COUNTY APPROACH

CFEMS

- We knew we had an issue with OD fatalities.
  - Rate climbing
- Looked at what each department could do
- How can we impact it?
  - Looked at overdoses since it may represent "near miss" and an opportunity to intervene

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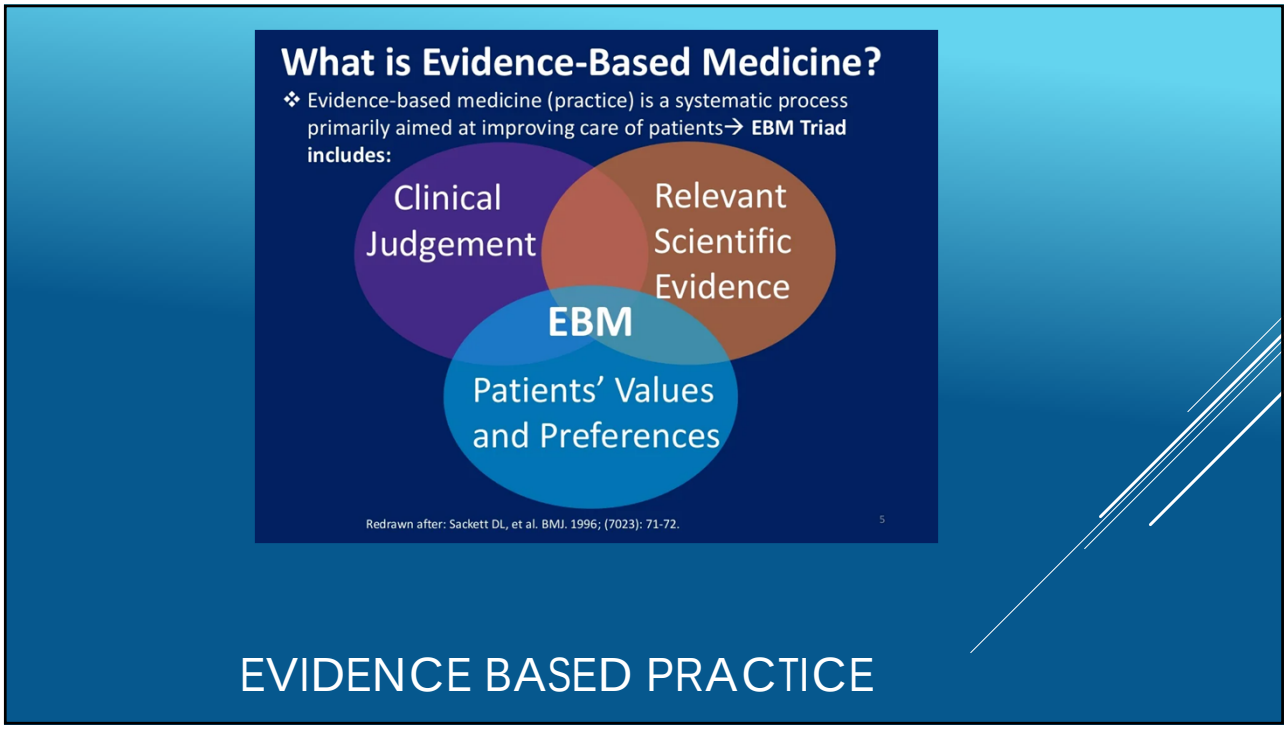
NOW WE KNOW THERE IS A PROBLEM WHAT DO WE DO NEXT?

20



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Level	Type of evidence
1A	Systematic review (with homogeneity) of RCTs
1B	Individual RCT (with narrow confidence intervals)
1C	All or none study
2A	Systematic review (with homogeneity) of cohort studies
2B	Individual Cohort study (including low quality RCT, e.g. <80% follow-up)
2C	"Outcomes" research; Ecological studies
3A	Systematic review (with homogeneity) of case-control studies
3B	Individual Case-control study
4	Case series (and poor quality cohort and case-control study
5	Expert opinion without explicit critical appraisal or based on physiology bench research or "first principles"

LEVELS OF EVIDENCE

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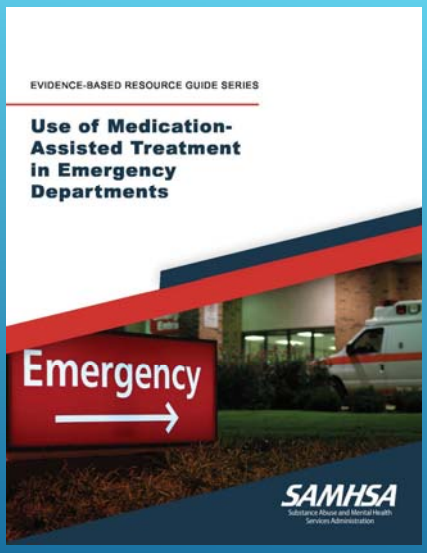

EVIDENCE BASED PRACTICES

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Peer-Delivered Recovery Support Services for Addictions in the United States: A Systematic Review

Ellen L Bassuk [1], Justine Hanson [2], R Neil Greene [2], Molly Richard [2], Alexandre Laudet [3]

Affiliations

PMID: 26882891 DOI: 10.1016/j.jsat.2016.01.003

Abstract

This systematic review identifies, appraises, and summarizes the evidence on the effectiveness of peer-delivered recovery support services for people in recovery from alcohol and drug addiction. Nine studies met criteria for inclusion in the review. They were assessed for quality and outcomes including substance use and recovery-related factors. Despite significant methodological limitations found in the included studies, the body of evidence suggests salutary effects on participants. Current limitations and recommendations for future research are discussed.

EVIDENCE BASED PRACTICES

24

Drugs. 2019; 79(13): 1395–1418. PMCID: PMC6728289
Published online 2019 Jul 27. doi: 10.1007/s40265-019-01154-5 PMID: 31352603

Take-Home Naloxone for the Emergency Interim Management of Opioid Overdose: The Public Health Application of an Emergency Medicine

John Strang,[1,2] Rebecca McDonald,[#1] Gabrielle Campbell,[3] Louisa Degenhardt,[3] Suzanne Nielsen,[3,4] Alison Ritter,[3] and Ola Dale[5,6]

JAMA Network Open.

Original Investigation | Substance Use and Addiction

Association of Take-Home Naloxone and Opioid Overdose Reversals Performed by Patients in an Opioid Treatment Program

Abstract

Key Points

EVIDENCE BASED PRACTICES

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HHS Public Access
Author manuscript
Peer-reviewed and accepted for publication

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Published in final edited form as:
Psychiatr Serv. 2014 Jun 1; 65(6): 716–726.
doi: 10.1176/appi.ps.201300249
PMCID: PMC4152944
NIHMSID: NIHMS604998
PMID: 24445820

Substance Abuse Intensive Outpatient Programs: Assessing the Evidence

Dennis McCarty, Ph.D., Lisa Braude, Ph.D., D. Russell Lyman, Ph.D., Richard H. Dougherty, Ph.D., A.M., Allen S. Daniels, Ed.D., Sushmita Shoma Ghose, Ph.D., and Miriam E. Delphin-Rittmon, Ph.D.

Abstract

Objective

Substance abuse intensive outpatient programs (IOPs) are direct services for people with substance use disorders or co-occurring mental and substance use disorders who do not require medical detoxification or 24-hour supervision. IOPs are alternatives to inpatient and residential treatment. They are designed to establish psychosocial supports and facilitate relapse management and coping strategies. This article assesses their evidence base.

Methods

Authors searched major databases: PubMed, PsycINFO, Applied Social Sciences Index and Abstracts, Sociological Abstracts, Social Services Abstracts, Published International Literature on Traumatic Stress, the Educational Resources Information Center, and the Cumulative Index to Nursing and Allied Health Literature. They identified 12 individual studies and one review published between 1995 and 2012. They chose from three levels of research evidence (high, moderate, and low) based on benchmarks for the number of studies and quality of their methodology. They also described the evidence of service effectiveness.

Results

Feedback

Back to Top

EVIDENCE BASED PRACTICES

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cmaj jamc

CMAJ. 1997 Aug 1; 157(3): 255–262. PMCID: PMC1227824
PMID: 9269196

Needle exchange programs: an economic evaluation of a local experience

M Gold, A Gafni, P Nelligan, and P Milson

Abstract

OBJECTIVE: To determine whether providing a needle exchange program to prevent HIV transmission among injection drug users would cost less than the health care consequences of not having such a program. DESIGN: Incidence outcome model to estimate the number of cases of HIV infection that this program would prevent over 5 years, assuming that the HIV incidence rate would be 2% with the program and 4% without it, and that an estimated 275 injection drug users would use the service over this time. SETTING: Hamilton, Ont. OUTCOME MEASURES: Estimated number of cases of HIV infection expected to be prevented with and without the program over 5 years; estimated lifetime health care costs of treating an AIDS patient. The indirect costs of AIDS to society (e.g., lost productivity and informal caregiving) were not included. Projected costs were adjusted (discounted) to reflect their present value. In a sensitivity analysis, 3 parameters were varied: the estimate of the HIV transmission rate if no needle exchange program were provided, the number of injection drug users participating in the program, and the discount rate. RESULTS: With very conservative estimates, it was predicted that the Hamilton needle exchange program will prevent 24 cases of HIV infection over 5 years, thereby providing cost savings of $1.3 million after the program costs are taken into account. This translates into a ratio of cost savings to costs of 4:1. The sensitivity analysis confirmed that these findings are robust. CONCLUSION: Needle exchange programs are an efficient use of financial resources.

Full Text

The Full Text of this article is available as a PDF (152K).

Feedback

EVIDENCE BASED PRACTICES

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COUNTY SOLUTION

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PROBLEM: OBSTACLES TO TREATMENT

- Stigma
  - not only friends, family and society but even from healthcare providers
- Access to treatment
  - MAT
  - Peer recovery specialists
  - IOP
  - Inpatient
- Social determinants of health
- Silos of care
- "Not my problem", "not our mission"
- Cost of Treatment

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SOLUTION: EMERGENCY SERVICES

- The 911 system is well-positioned to intervene because we have access to individuals at a time that they may be receptive to recovery.
- EMS is well positioned to assist in mitigating effects of and reduce social determinants of health.
- The window of time to engage these patients in recovery efforts is often small and fleeting.

30

SOLUTION: OVERCOMING STIGMA

- Treating SUD as a disease
- Treating each patient like a person
- Incorporation of Peer Recovery Specialist
- Widespread education and engagement of departmental personnel

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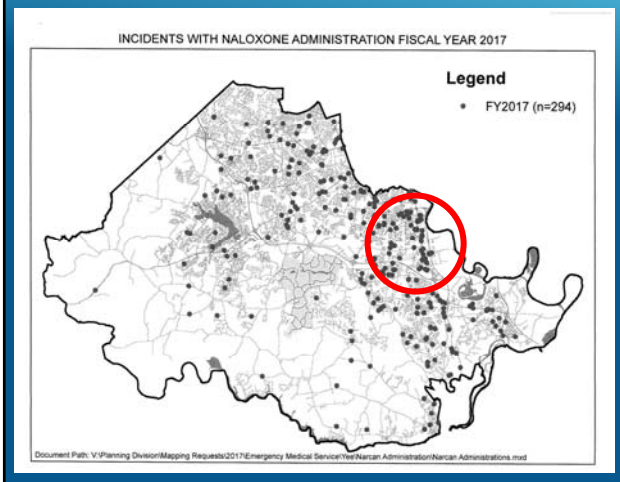
SOLUTION – SOCIAL DETERMINANTS OF HEALTH



- High risk Community
  - Lack of access
  - Higher rate of poverty
  - High disease burden
- Health fair
  - Health screening
  - Narcan training
  - Social services for medicaid application, etc
  - Mental health services
  - Linkage to SUD services

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MOBILE INTEGRATED HEALTHCARE

- Four Firefighter/Paramedics, One Firefighter/EMT, one Lieutenant/Paramedic.
- Follow up with patients after 911 call and attempt to determine root cause of calls and implement solutions
- Connect citizens in need with resources such as specialists, Mental Health Support Services, Social Services, home health, non-profits or any other partner able to help meet their needs.

SOLUTION: ACCESS

33

- Works as part of a collaborative effort to help citizens dealing with addiction issues.
- Anytime Naloxone is administered in the field, or a call is coded as an overdose, MIH Program Manager is notified and sets up a case for MIH provider to follow up to attempt to provide resources.
- Interacts with multiple county and private agencies to assist individuals struggling with addiction.
- Works with social services for patient to get Medicaid
- Had access to some grant funding to pay for limited services
  - Sober living, housing assistance
  - IOP
  - MAT
  - Transportation, child care services, food assistance

SOLUTION: MIH PROGRAM – SUD INITIATIVE

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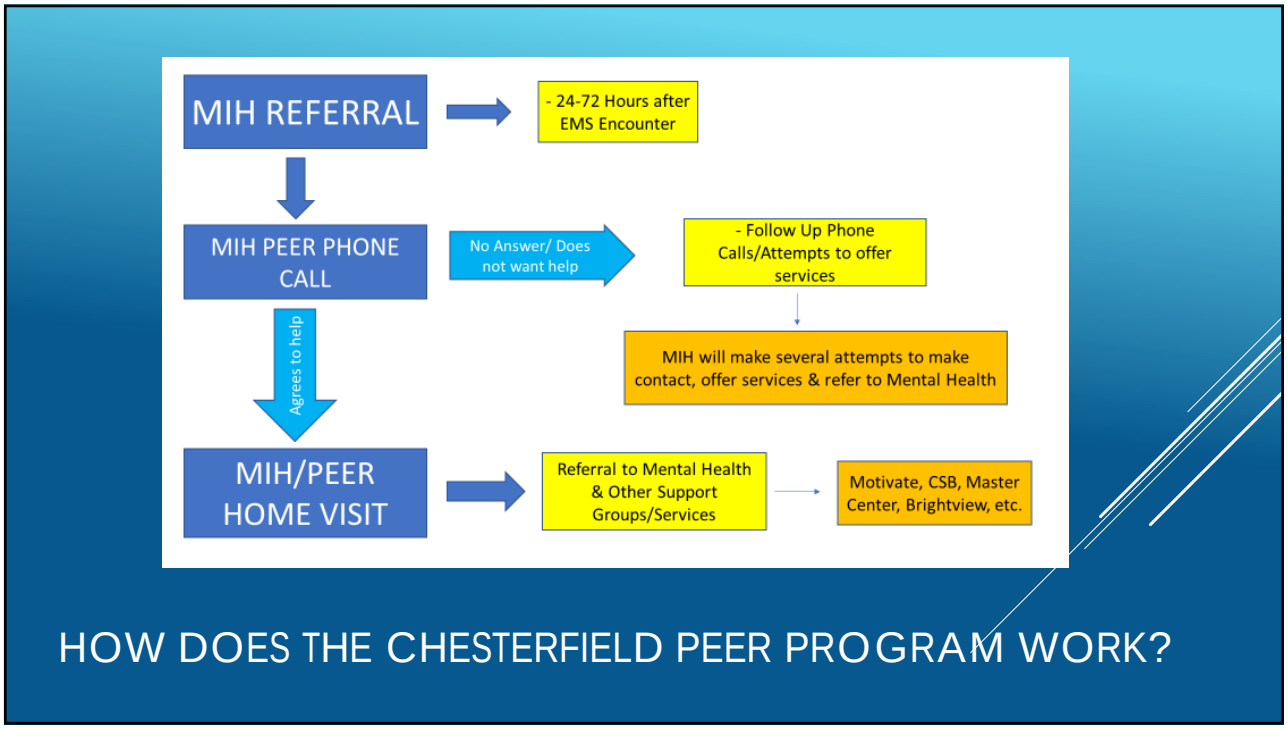
MIH REFERRAL
- 24-72 Hours after EMS Encounter
MIH PEER PHONE CALL
No Answer/ Does not want help
- Follow Up Phone Calls/Attempts to offer services
Agrees to help
MIH will make several attempts to make contact, offer services & refer to Mental Health
MIH/PEER HOME VISIT
Referral to Mental Health & Other Support Groups/Services
Motivate, CSB, Master Center, Brightview, etc.
HOW DOES THE CHESTERFIELD PEER PROGRAM WORK?

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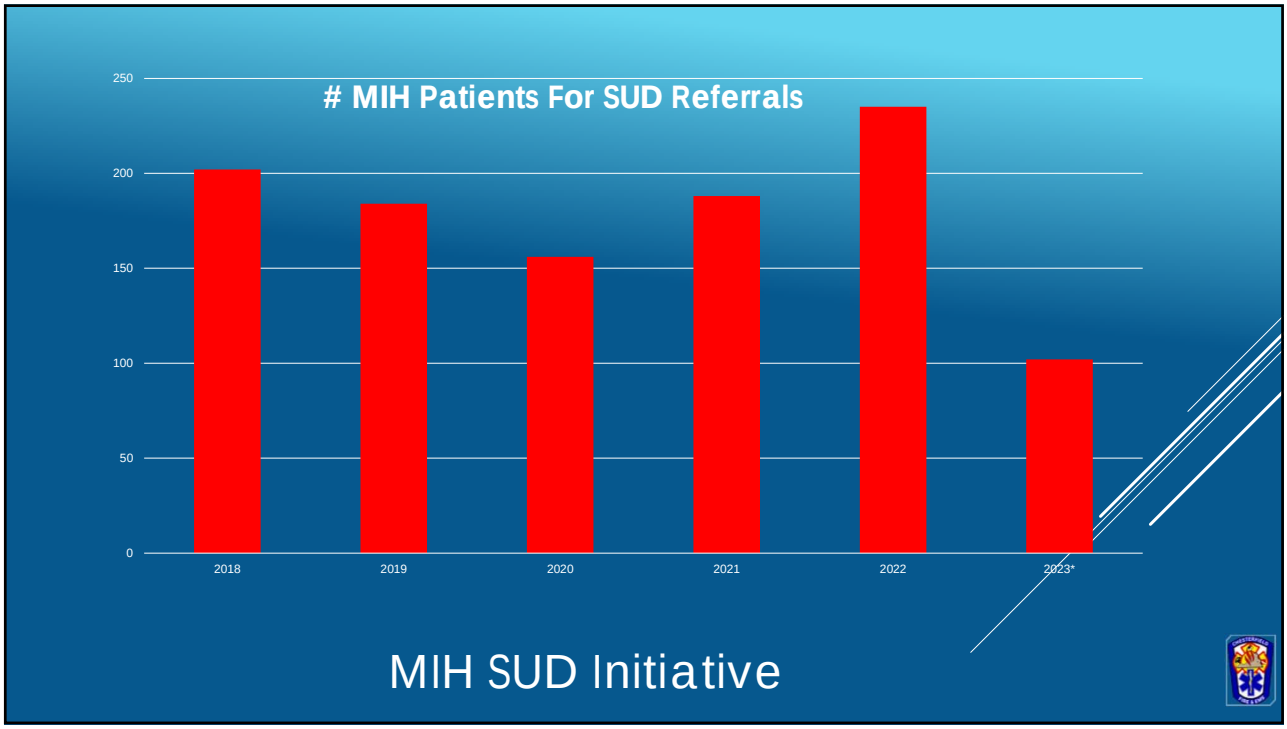
MIH Patients For SUD Referrals
250
200
150
100
50
0
2018
2019
2020
2021
2022
2023*
MIH SUD Initiative

36

RATES OF UNINSURED AND UNDERINSURED WITH SUD

- 83.5% of 364 total Chesterfield Fire and EMS calls where Narcan was administered over a one year period were uninsured.
- 74.8% of those who were transported for SUD-related issues were uninsured.
- 2021 poverty rates for the Chesterfield Health District are shown below:

Locality	Median Income (2021)	Poverty Rate (2021)	% of students eligible for free or reduced school lunch
Chesterfield County	$88,315	7.4%	48%
Colonial Heights City	$65,570	9.0%	85%
Petersburg City	$44,890	21.3%	100%
Powhatan County	$101,395	6.0%	28%

PROBLEM: ACCESS

37

- The window of time to engage those with SUD while they are receptive is often small.
- Evidence-based practices which have been proven to give patients the highest likelihood of success in recovery include connection to MAT and wraparound support services.
- As many of these people do not have access to adequate insurance or resources, recovery funding to act on their behalf is paramount.
- The Opioid Abatement Authority recently approved the allocation of almost $1,500,000 for the Chesterfield Health District for the addition of Outreach Specialists, Peer Recovery Specialists and funding for wraparound services and harm reduction.

RESOURCES FOR THE UNINSURED AND UNDERINSURED

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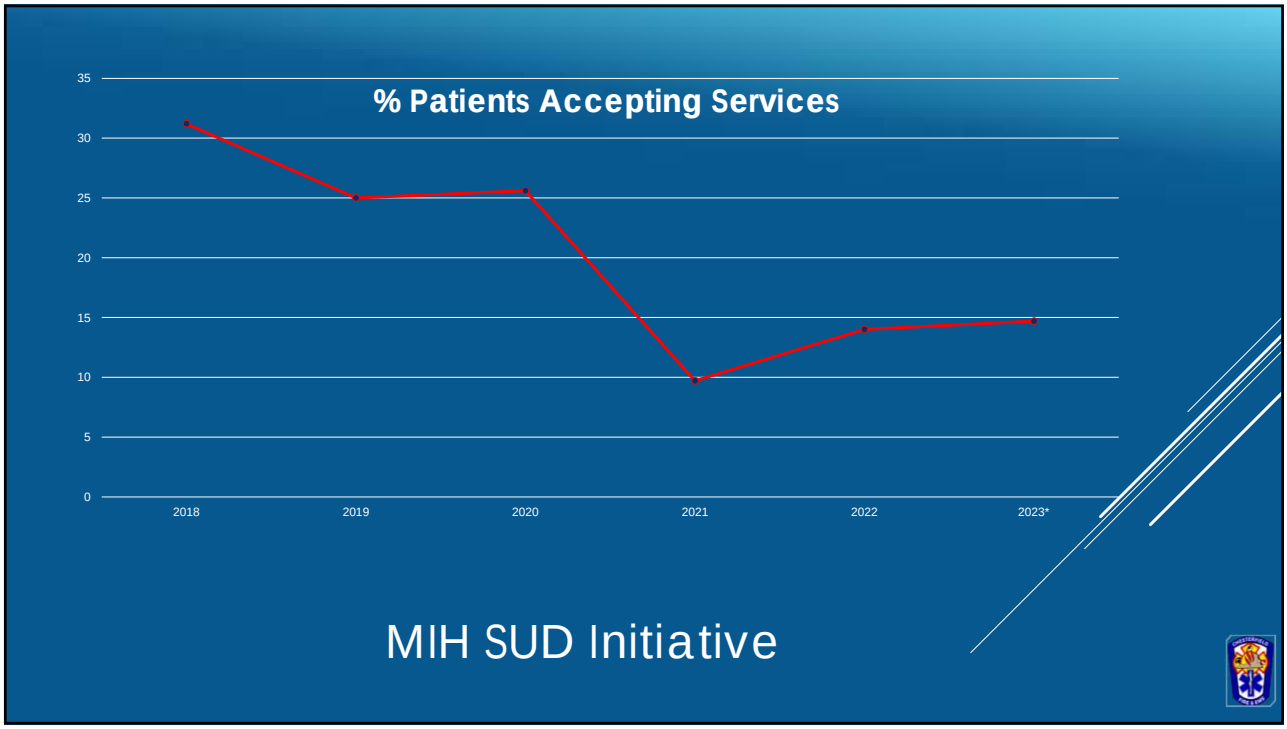
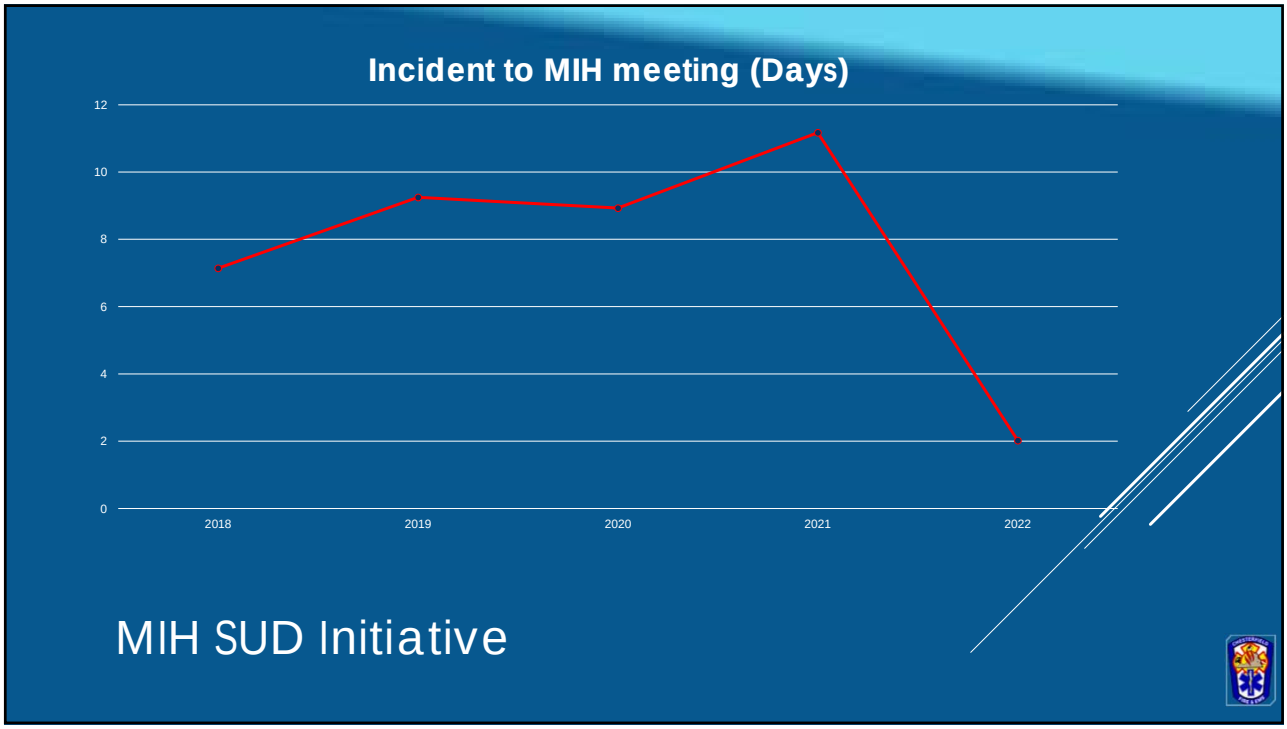

% Patients Accepting Services
35
30
25
20
15
10
5
0
2018
2019
2020
2021
2022
2023*
MIH SUD Initiative

39

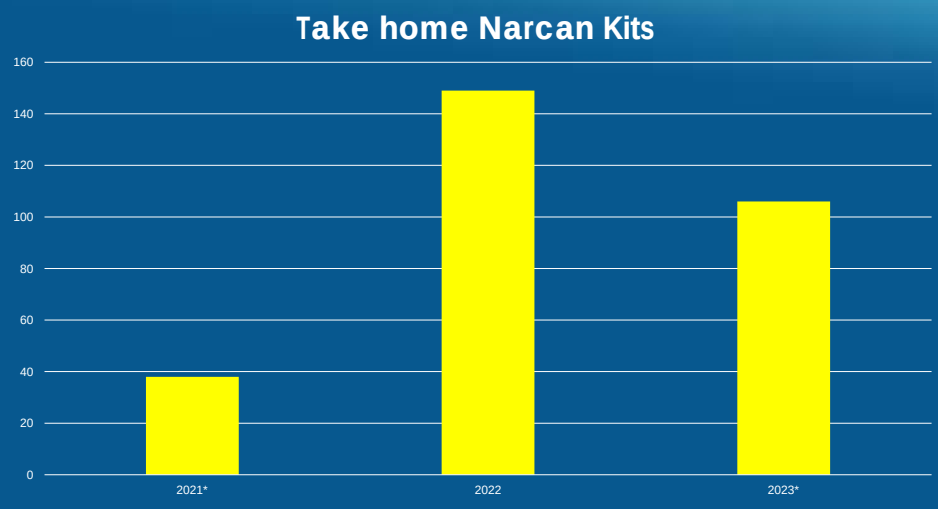

Incident to MIH meeting (Days)
12
10
8
6
4
2
0
2018
2019
2020
2021
2022
MIH SUD Initiative

40

- **Narcan leave-behind program after 911 calls for service where the providers have discretion to give kit to patient or family**
- **Fire and EMS providers understand that addiction is a disease and we are treating it similarly to other diseases**

SOLUTION: HARM REDUCTION EFFORTS

41



HARM REDUCTION - NARCAN TAKE HOME KITS

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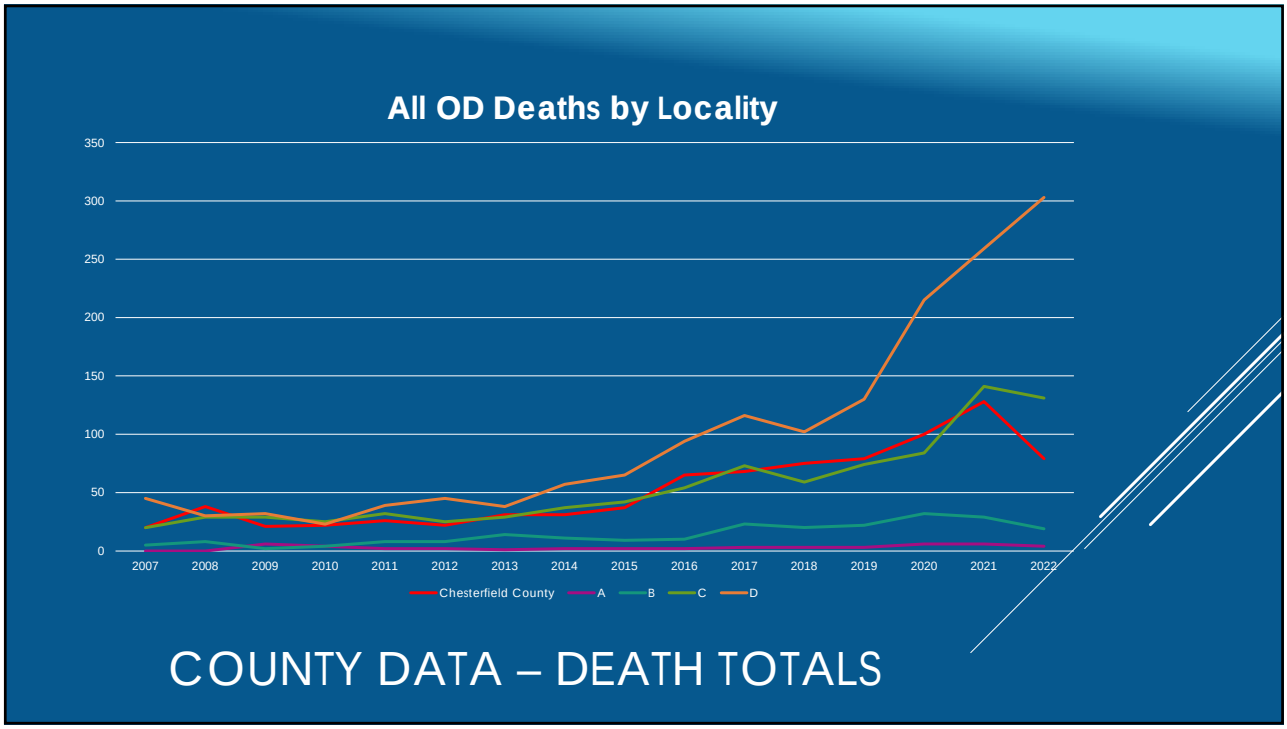
All OD Deaths by Locality
350
300
250
200
150
100
50
0
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Chesterfield County
A
B
C
D
COUNTY DATA – DEATH TOTALS

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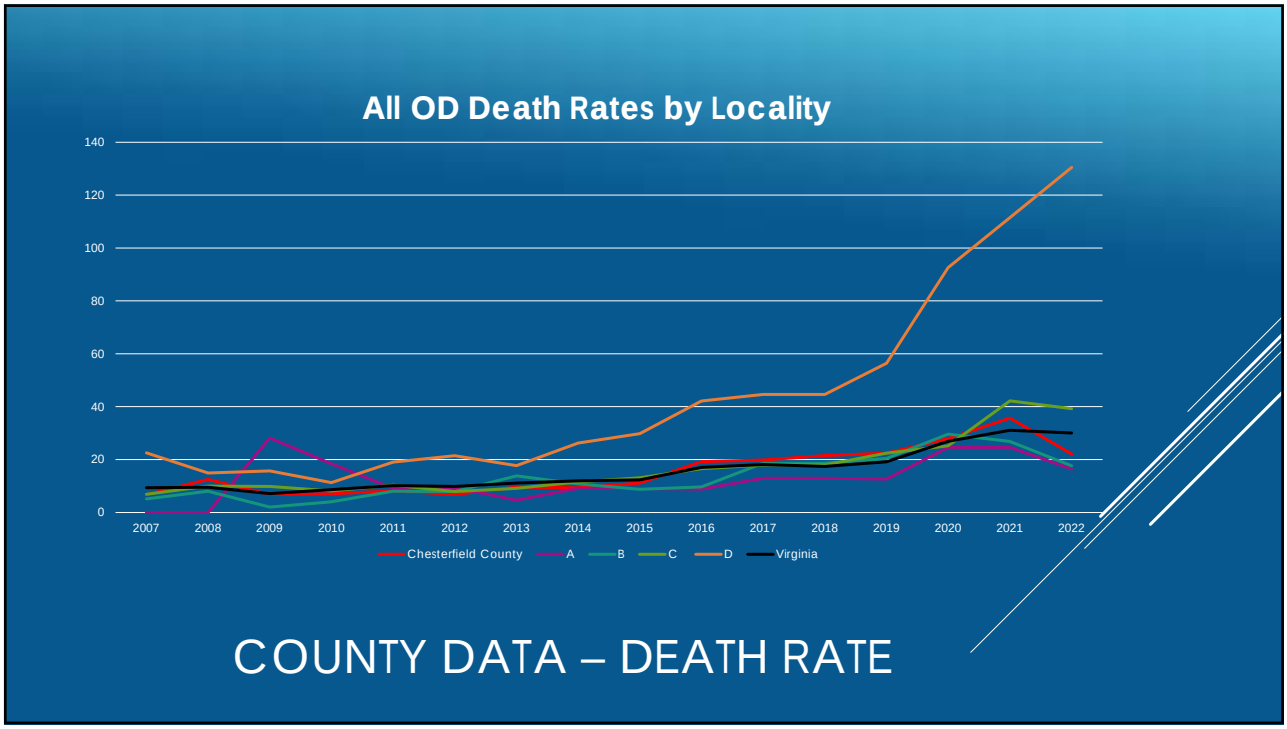
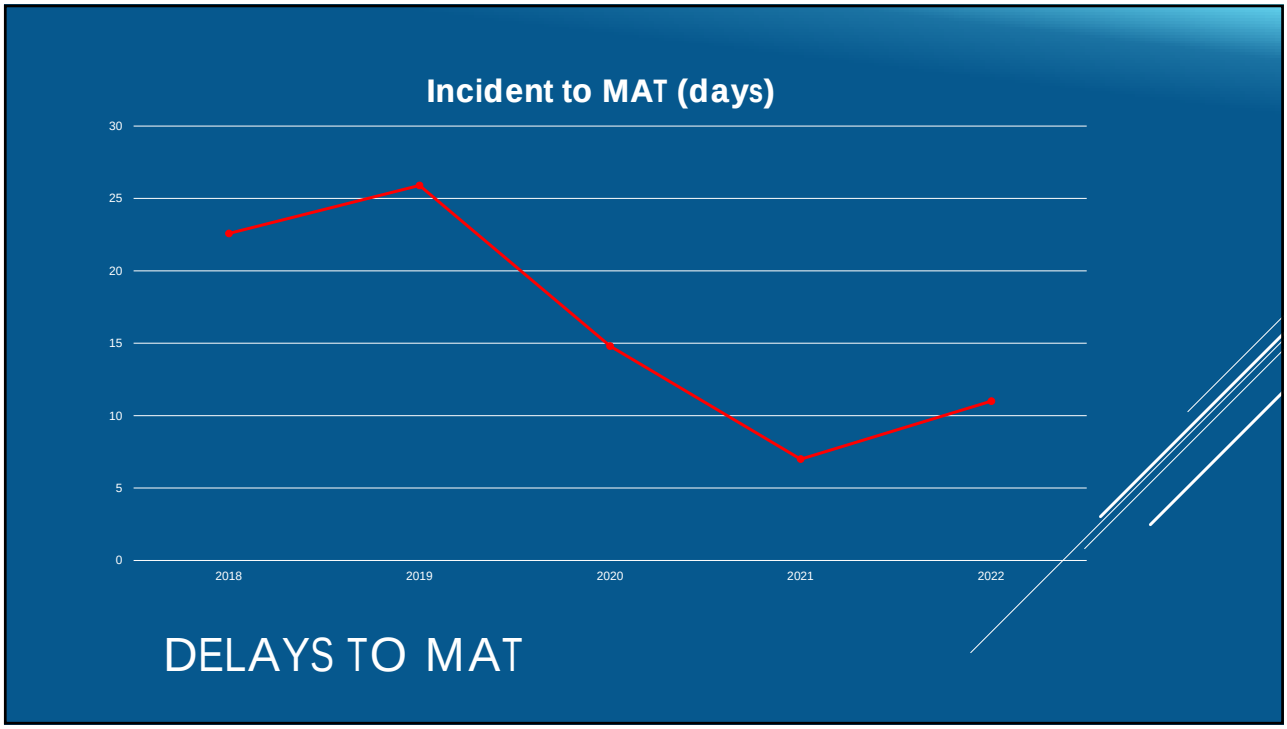

All OD Death Rates by Locality
140
120
100
80
60
40
20
0
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
Chesterfield County
A
B
C
D
Virginia
COUNTY DATA – DEATH RATE

44



DELAYS TO MAT

45

- Prehospital Suboxone
  - Initially via MIH using prescriptions sent to pharmacies after telehealth visit
    - Will likely start administering Suboxone by MIH personnel after telehealth eval
    - May eventually start on units in emergency operations during 911 call

FUTURE SOLUTION/ INITIATIVES (ESTIMATED 6/2023)

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FUTURE INITIATIVES

- Designated drop off programs in partnership with ED's
  - EDs would start Suboxone
  - MIH will facilitate additional dosing and follow up with IOP

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SUMMARY

- Addiction is a massive public health crisis
- Data shows the needs in your communities
- Data and evidence based practices can prioritize resources and reduce wasteful spending
- Making strides on behalf of those struggling with addiction is going to take a complete multidisciplinary approach with many organizations working together to reach people where they are.
- Despite not being a traditional core function, many departments are positioned to be a key contributor in helping those dealing with addiction get recovery resources.

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Contact Information

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Questions?

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