Healthy People 2020: Who’s Leading the Leading Health Indicators?
Tiffani Kigenyi, MPH
Public Health Analyst, 
Office of Disease Prevention and 
Health Promotion, 
U.S. Department of Health and Human Services
• **Leading Health Indicators are:**
  - Critical health issues that, if addressed appropriately, will dramatically reduce the leading causes of preventable deaths and illnesses
  - Linked to specific Healthy People objectives
  - Intended to motivate action to improve the health of the entire population

1200 Healthy People objectives

LHIs are a subset of Healthy People objectives
Who’s Leading the Leading Health Indicators?

**Featured Speakers:**

- **Don Wright, MD, MPH** - Acting Assistant Secretary for Health, U.S. Department of Health and Human Services

- **Dr. Sarah Bacon, PhD** - Lead Behavioral Scientist, Opioid Overdose Prevention Programs Team, Division of Unintentional Injury Prevention, National Center for Injury Prevention, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services

- **Fred Wells Brason II** - President, CEO, Project Lazarus
Dr. Don Wright, MD, MPH
Acting Assistant Secretary for Health, U.S. Department of Health and Human Services
• Unintentional injuries and violence-related injuries are important public health issues in the United States.

• Examples include motor vehicle crashes, homicide, domestic and school violence, child abuse and neglect, suicide, and unintentional drug overdoses.

• Both unintentional injuries and suicide are among the top 15 leading causes of death for Americans of all ages.

• In 2016, unintentional injuries were the 3rd leading cause of death for Americans of all ages.
Injury and Violence
Leading Health Indicators

• Reduce fatal injuries (IVP-1.1)

• Reduce homicides (IVP-29)
Homicide Rates

NOTES: Data are for ICD-10 codes *U01-*U02, X85-Y09, Y87.1 reported as underlying cause of death and are age adjusted to the 2000 standard population.


Obj. IVP-29
Decrease desired
All Injury Death Rates by Sex

Rate per 100,000 (age adjusted)

NOTES: Data are for injury deaths regardless of intent (unintentional, intentional, undetermined) based on ICD-10 codes *U01-*U03, V01-Y36, Y85-Y87, Y89 reported as the underlying cause of death. Rates are age adjusted to the 2000 standard population.


Obj. IVP-1.1
Decrease desired
Injury Death Rates by Cause

NOTES: Data are for poisoning, firearm and fall deaths regardless of intent (unintentional, intentional, undetermined). Motor vehicle traffic deaths are all unintentional. *IVP-23.1 tracks only unintentional fall deaths, which constitute the majority of fall deaths. IVP-23.1 does not include fall deaths that are of intentional or of undetermined intent so the HP2020 target is not shown. Rates are age adjusted to the 2000 standard population.

Poisoning Death Rates by Poison Type

Rate per 100,000 (age-adjusted)

NOTES: Data are for poisoning deaths regardless of intent (unintentional, intentional, undetermined). All poisoning data are for ICD-10 codes *U01.6-*U01.7, X40-X49, X60-X69, X85-X90, Y10-Y19, Y35.2 reported as underlying cause of death. Drug poisoning data are for ICD-10 codes X40-X44, X60-X64, X85, Y10-Y14 reported as the underlying cause of death. Opioid data are for drug poisonings reported as the underlying cause with ICD-10 T40.0-T40.4, 40.6 reported as a multiple cause of death, Both prescription and nonprescription opioids are included. Rates are age adjusted to the 2000 standard population.

Addressing Drug Overdoses in the United States

• Drug overdose deaths in the United States more than tripled from 1999 to 2016.

• In 2016, opioids killed more than 42,000 people in the United States.

• The best ways to prevent opioid overdose deaths include:
  o Improve opioid prescribing
  o Reduce exposure to opioids
  o Prevent misuse
  o Treat opioid use disorders
  o Reverse overdoses
Injury Death in the United States

A focus on Opioids

Sarah Bacon, PhD
Lead Behavioral Scientist
Division of Unintentional Injury Prevention

Healthy People 2020
January 18th, 2018
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Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System. 
Produced by: National Center for Injury Prevention and Control, CDC using WISQARS™.
Healthy People 2020 and the Opioid Epidemic

IVP- 1.9

Prevent an increase in poisoning deaths
2000 Rapid Increase in Drug Overdose Death Rates by County

2005 Rapid Increase in Drug Overdose Death Rates by County

2010 Rapid Increase in Drug Overdose Death Rates by County

2015 Rapid Increase in Drug Overdose Death Rates by County

RISE IN OPIOID DEATHS | Overlapping, Entangled but Distinct Epidemics

**Graph: Deaths per 100,000 population**

- **Other Synthetic Opioids** (e.g., fentanyl, tramadol)
- **Heroin**
- **Natural & Semi-Synthetic Opioids** (e.g., oxycodone, hydrocodone)
- **Methadone**

Rise in Prescription Opioid Deaths in United States

1st Wave

Nearly 200,000 people died from prescription opioids in the last 17 years.

Natural and semi-synthetic opioid death rate increased 5-fold from 2000 to 2011

Methadone death rate increased 4-fold from 2000 to 2007

Rise in Heroin Deaths in United States

2nd Wave

Over 60,000 people have died from heroin since 2010

Heroin death rate has increased over 5 fold since 2010

Rise in Synthetic Opioid Deaths in the United States – Likely Illicit Fentanyl

3rd Wave

Deaths from synthetic opioids excluding methadone increased from approximately 3,100 in 2013 to over 19,000 in 2016

Synthetic opioid death rate (excluding methadone) has increased 6-fold from 2013 to 2016

Pillars of CDC Activity

1. Conduct surveillance and research
2. Build state, local, and tribal capacity
3. Support providers, health systems, and payers
4. Partner with public safety
5. Empower consumers to make safe choices

https://www.cdc.gov/drugoverdose/index.html
Conduct Surveillance and Research

Overdose Prevention in States (OPIS)
Conduct Surveillance and Research

OPIS’s Enhanced State Opioid Overdose Surveillance
(https://www.cdc.gov/drugoverdose/foa/state-opioid-mm.html)

Injury Control Research Centers (ICRC) fund extramural research like Project Lazarus
Build State, Local, and Tribal Capacity

Five Components of OPIS

- PDMPs
- System-Level
- Evaluate Policy
- Surveillance
- Rapid Response

https://www.cdc.gov/drugoverdose/states/state_prevention.html
Support Providers, Health Systems, & Payers

APP includes:

- MME Calculator
- Prescribing Guidance
- Motivational Interviewing

https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm
Partner with Public Safety

Heroin Response Strategy
Empower Consumers to Make Safe Choices

Prescription opioids can be addictive and dangerous.

It only takes a little to lose a lot.

cdc.gov/RxAwareness

www.cdc.gov
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
PROJECT LAZARUS

ODPHP Office of Disease Prevention and Health Promotion

Fred Wells Brason II President/CEO
Wilkes County, NC

Wilkes County, NC

Marvelous 4 M’s

- Moonshine
- Marijuana
- Meth
- Medicine

- 2007 3rd worst USA County for mortality from prescription medication - CDC
- Number One in NC for meth lab busts 2012 & 2013 - NC SBI
- Wilkes County had the 2nd largest percentage decrease in median income in all USA counties 2000 to 2014 - U.S. Census data.
Prevent, Intervention, Treatment... why should I care?
Community Education

“Got Meds?:
*take correctly, store securely, dispose properly and never share.*”

A prescriber can write appropriately, a pharmacist can dispense properly...but once in the community?

https://www.samhsa.gov/capt/tools-learning-resources/opioid-overdose-prevention-toolkit
• Why am I/We needed
• What do I/We need to know
• What needs to be done
Wilkes Chronic Pain Initiative (CPI) Pilot

Northwest Community Care Network, Wilkes Health Department and Project Lazarus

- Use of the Prescribers Toolkit
  - Bio/Psycho/Social Assessment
  - Overdose/Respiratory Depression Risks
  - Use of Prescription Drug Monitoring Program (CSRS)
  - Treatment Agreement
  - Urine screens/pill counts
  - Co-Prescribing naloxone
  - Prescribing Abuse Deterrent Formulations

https://www.communitycarenc.org/population-management/opioid-safety/
Hospital Emergency Department (ED) Policies –

Initiated Wilkes Regional Hospital

1) Embedded ED Case Manager
2) “Frequent fliers” for chronic pain, non-narcotic medication and referral
3) No refills of controlled substances
4) Utilization of PDMP (CSRS)
5) Limited dosing (10 tablets)
6) Co-prescribing naloxone
7) Peer Support

*Adopted by many hospitals and hospital networks in NC*

[https://www.projectlazarus.org/hospital-ed-policies](https://www.projectlazarus.org/hospital-ed-policies)

DISPOSAL-Diversion Prevention

https://www.projectlazarus.org/ncdi
Overarching Medication Disposal Study Concept

Education for Prevention

PROJECT LAZARUS

- Patient
- Caregiver
- Family
- Health Department
- Dentist
- Clinic
- Work
- Hospital
- Pharmacist
- School
- Physician
- Media
Appropriate treatment for chronic pain is multimodal including interventions like:

- Psychotherapy/counseling
- Chiropractic
- Acupuncture
- Physical and Occupational Therapy
- Massage Therapy
- Relaxation/guided imagery/meditation
- Exercise
- Weight loss
- Good nutrition
- Etc.

“Meeting patients where they are at” means that small changes at home and daily living can lead to less pain.
• Respiratory depression/Overdose prevention training
• Distributing a script that gives patients specific language they can use with their family to talk about overdose and develop an action plan, similar to a fire evacuation plan
• Naloxone access to all at risk! (2008 NC Medical Board Position Statement)

• Third Party Prescribing
• Standing Orders – 47 states
• Pharmacy Dispensing
• Program Distribution
• New Devices
• Federal/State Funding

http://prescribetoprevent.org
Substance Use Disorder treatment, Unfortunately, access to treatment is limited by three main factors:

- Acceptance, Availability and Accessibility
- Stigma associated with addiction and drug treatment.
- Integration
  Law Enforcement – Behavioral Health –
  SA Treatment – ED – Health Department –
  Medical Providers – Labor and Delivery – OB/GYN – Community

buprenorphine, naltrexone, methadone, 12 Step, abstinence programs, residential, Peer and Community Support

Opioid Treatment Program in Wilkes now over 600 clients
OD ED VISITS PER 1k OPIOID SCRIPTS
A priori selected metric for risk-benefit

COALITION FUNDING HELPS
Funded coalitions had 18% lower rates than non-funded

PROFESSIONAL COALITIONS WORKING
Coalitions led by health departments had 26% lower rates

PRELIMINARY ANALYSIS
Much more to be done! Does not take into account the interventions themselves

IS THERE A “HEALTHY COUNTY” BIAS?
Propensity score modeling ahead

This decrease represents 4 fewer ED visits per 3,000 opioid scripts in counties with Health Department-led coalitions.
(20,000 NC ED visits - NC ED OD visit $12,000 – Medicaid $72 million 2014)
Stephen Marshall, PhD, professor of epidemiology at UNC Gillings School of Public Health and director of the Injury Prevention Research Center, also was a co-author of the evaluation.

“This study is especially important because it helps empower community coalitions to fight the opioid problem, .... What this study shows is that well-supported community coalitions are integral to helping Americans heal this terrible wound.”


Funding Collaboration: Private Industry, Federal (CMS Innovation Grant), State (NC Office of Rural Health), Local (Health Department), Trust Foundation (Kate B. Reynolds Trust)
COMMUNITY GOALS – EVERY SECTOR

Achieve Measurable Reductions in Substance Use and Overdose Using a Comprehensive Approach

- Expand and Strengthen Primary Prevention
- Improve Monitoring and Surveillance
- Expand and Strengthen Control and Enforcement
- Increase Utilization of Treatment and Support of Recovery
“Project Lazarus is an exceptional organization—not only because it saves lives in Wilkes County, but also because it sets a pioneering example in community-based public health for the rest of the country.”
Roundtable Discussion
The Diagnosis, Prevention, and Treatment of Sensory Disorders

Thursday, February 22 | 12:30 PM ET

Join us as we review the progress of Healthy People 2020 objectives in the Hearing and Other Sensory or Communication Disorders and Vision topic areas.

To register, visit: healthypeople.gov
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Drug Overdose Death Rates by Opioid Category

NOTES: Data are for opioid overdose deaths regardless of intent (unintentional, intentional, undetermined). Drug poisoning data are for ICD-10 codes X40-X44, X60-X64, X85, Y10-Y14 reported as the underlying cause of death. Drug overdose deaths involving selected drug categories are identified by specific multiple-cause-of-death codes: heroin, T40.1; natural and semisynthetic opioids, T40.2; methadone, T40.3; synthetic opioids other than methadone, T40.4. Deaths involving more than one opioid category (e.g., a death involving both methadone and a natural and semisynthetic opioid) are counted in both categories. The percentage of drug overdose deaths that identified the specific drugs involved varied by year ranging from 75-79% from 1999 through 2013 and from 81-85% from 2014 through 2016.