Brief Overview of the New Jersey Rural Health Landscape

Introduction
The New Jersey State Office of Rural Health (NJSORH) serves as a statewide resource for rural health concerns and is housed within the New Jersey Office of Primary Care and Rural Health (OPCRH). This summary highlights some key issues in New Jersey’s rural areas.

Methodology
This summary contains various sources used to identify high-priority public health needs. These primary and secondary data sources include the New Jersey Rural Health Advisory Council, New Jersey State Health Assessment Data¹ (NJSHAD), Community Health Assessments, Community Health Needs Assessments, and Community Health Improvement Plans.

Rural New Jersey
As the nation’s most densely populated state², New Jersey is often heralded as an urban and suburban oasis, which at times can overshadow the rural regions of the state. However, within New Jersey, each county has unique characteristics and populations that can lead to disparate levels of health inequalities and outcomes, especially for rural counties.

In New Jersey, rural is defined as a municipality or county with a population density of fewer than 500 people per square mile.³ Based on census data, seven counties in the state met this definition, as shown in Figure 1. These counties included Atlantic, Cape May, Cumberland, Hunterdon, Salem, Sussex, and Warren. Additional counties have municipalities that fit into the rural definition, rendering them rural sub-counties.³ Population estimates from the New Jersey Department of Labor and Workforce Development from 2017 indicate that approximately 952,340 residents in New Jersey live in rural counties, equaling about 10.6% of the overall population.

Access to Care in Rural NJ
Providers and consumers surveyed for the 2020 Rural Health Needs Assessment identified access to healthcare and its cost as significant barriers to maintaining and improving the health of rural New Jerseyans. Other identified barriers include lack of health insurance, cost of healthcare, scarcity of healthcare providers, language barriers, lack of transportation, immigration status, and lack of information on available resources. While many of these factors affect residents across New Jersey, some can be exacerbated by factors unique to rural areas. Barriers such as fewer locally practicing specialists, limited public transportation, and language barriers in more rural areas can amplify difficulties in access to care.
Undoubtedly, it is necessary to have an adequate number of providers compared to the size of the population being served. Assessing the population-to-provider ratio is one measure that is used to determine access to healthcare for a particular region. These ratios are used by HRSA to determine provider shortages, with higher ratios indicating more likely healthcare workforce shortage areas. The maps below indicate population-to-provider ratios for primary care, mental health physicians, and dentists. This data was collected from County Health Rankings. Darker shades indicate higher population-to-provider ratios. As seen in Figure 2, many rural counties have higher ratios, highlighting that there are fewer providers available to provide adequate health services.

Access to care also takes into consideration the proximity to healthcare facilities. Federally Qualified Health Centers (FQHCs) serve to provide comprehensive primary care, behavioral health services, and dental care to all patients regardless of ability to pay or insurance status. Among the 23 FQHCs in New Jersey, four largely serve rural counties. Despite these assets, there may still be gaps and provider shortages in these areas.

Health Indicators
There are several health indicators and disparities in health outcomes that adversely impact rural regions. These indicators are presented separately but often have similar underlying factors, such as lack of access to care due to physician shortages, transportation issues, or limited insurance coverage. This summary highlights a few of the indicators that were found to have higher rates in rural counties, namely tobacco use, cancer, and substance abuse.

Tobacco. Tobacco use is the largest preventable cause of death, disease, and disability in the United States. According to the New Jersey Behavioral Risk Factor Survey (NJBRFS), most rural counties in New Jersey have significantly higher rates of adult smokers than non-rural counties as shown in Table 1.
Table 1

<table>
<thead>
<tr>
<th>County</th>
<th>Percent current adult smokers</th>
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<tbody>
<tr>
<td>Atlantic</td>
<td>19.7%</td>
</tr>
<tr>
<td>Cape May</td>
<td>19.9%</td>
</tr>
<tr>
<td>Cumberland</td>
<td>23.7%</td>
</tr>
<tr>
<td>Hunterdon</td>
<td>19.3%</td>
</tr>
<tr>
<td>Salem</td>
<td>19.0%</td>
</tr>
<tr>
<td>Sussex</td>
<td>16.4%</td>
</tr>
<tr>
<td>Warren</td>
<td>12.9%</td>
</tr>
<tr>
<td><strong>NJ State Average</strong></td>
<td><strong>14.1%</strong></td>
</tr>
</tbody>
</table>

Tobacco use during pregnancy can increase the likelihood of preterm delivery or low infant birth weight. Increased tobacco use rates were also observed in rural counties among pregnant women. These rates were highest in Salem (12.9%), Cape May (11.5%), and Cumberland (9.6%) counties. These rates are compared to roughly 6% for the United States and approximately 3% for New Jersey’s average. 

**Cancer.** The three leading causes of cancer-related death in New Jersey are lung and bronchus, colorectal, and pancreatic cancers. Much of the burden of disease is carried by New Jersey’s rural counties. According to 2017 data, Cape May County had an age-adjusted death rate of 20.6 per 100,000 due to colorectal cancer, the highest in the state. This is compared to the state average of 13.3 per 100,000. Salem County had the highest death rates in the state for lung and bronchus cancer (73.1 per 100,000) as well as pancreatic cancer (17.8 per 100,000) in 2017. The lung and bronchus cancer rate for Salem County was more than twice that of the state average, 31.8 per 100,000.

**Substance Abuse.** In 2018, nearly 90% of the 2,900 reported drug overdose deaths in New Jersey involved opioids. There were a total of 2,583 fatalities at a rate of 29.7 per 100,000 population. Substance abuse admission rates track admissions for alcohol, drugs, and unknown substances. The statewide substance abuse admission rate was 980 per 100,000 population, but several rural counties experienced much higher rates. Cape May County had the highest admission rate in 2018 at 2,586 per 100,000 population. Other rural counties experiencing substance abuse admission rates above the state average included Atlantic (2,410), Cumberland (1,691), Salem (1,121), and Warren (1,249).

**Social Determinants of Health.** In addition to physical health indicators, social determinants of health must be considered when learning the landscape of rural New Jersey. Social determinants of health are the conditions in the environments where people live, learn, work, play, worship, and age. They can affect a wide range of health, functioning, and quality-of-life outcomes and risks. Along with access to care, indicators such as age, poverty, homelessness, and education are critical components when assessing factors at play in health outcomes.
References

1 State Health Assessment Data (NJSHAD). (n.d.). https://www.nj.gov/health/chs/njshad/
3 New Jersey Department of Health: Primary Care and Rural Health. (n.d.) https://www.nj.gov/health/fhs/primarycare/rural-health/
10 National Academy of Medicine. (2021, June 24). https://nam.edu/?gclid=EAIaIQobChMI576z5aC78QIVCbLICCh3QAwcvEAAAYASAEgKytfD_BwE