

The Problem Statement

Learning Objectives

At the end of this module, you will be able to:

- **Discuss why a problem statement is needed**
- **Describe the key questions you need to address in an effective problem statement**
- **Understand how visual displays can help describe the problem**



The Problem Statement

- **Critical part of your policy brief!**
- **Opportunity to demonstrate to your reader that your health problem is:**
 - Important
 - Worth their time and efforts
 - More deserving of attention / resources than other problems
 - Fixable / modifiable



The Problem Statement

- **Clearly identifies the policy issue**
 - Describes the public health problem
 - The main modifiable driver (root cause/s) of the problem
- **Describes the situation from a local perspective**
 - Quantifies the burden of problem
 - Describes the impact of the problem on public health
 - Presents visual summaries of data (graphs, figures)
 - Discusses data published by local sources
 - Describes previous efforts to address the issue
- **Describes issue from a global/regional perspective, if needed**



Key Questions to Answer in a Problem Statement

1. What is the problem?

- Health problem / outcome
- Primary cause

2. Qualify the problem:

- Who is affected by the problem?
- Where is the problem present?

3. Quantify the problem

- How much?
- When?

4. What are the root cause(s) of the problem?

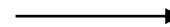


1. What is the Problem?

- Both a *health problem* and *primary cause*
- Both of these *must* be well-understood *and* have a local evidence base before starting a policy brief

PRIMARY CAUSE OF
HEALTH PROBLEM

Low use of
PPE among
healthcare
workers



HEALTH PROBLEM
(OUTCOME)

High rates of TB
among
healthcare
workers

Returning to Smoking in Kentucky...

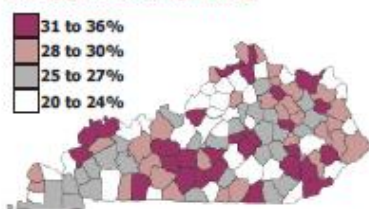
Smoking in Kentucky—We're Number 1!

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- Over 45% of Kentucky children live in a household where someone smokes, compared to a national average of 29.5%.

The High Cost of Smoking—Everyone Pays

Percent of Adults Smokers in Kentucky by County (National Average is 21%)



Source: The Health Assessment of KY: A County Assessment, KY Institute of Medicine, 2007

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- Taxpayers pay more than \$480 million each year in smoking-related health costs in Kentucky's Medicaid program.

- Employers and consumers pay higher health care prices and insurance premiums to cover the \$1.5 billion annual cost of treating smokers.
- Health care providers pay in lost revenues by providing charity care to the uninsured who have smoking-related conditions and are unable to pay medical bills.

At 30 cents per pack, Kentucky's cigarette tax is lower than five of its seven bordering states and ranks 47th in the nation—only South Carolina, Mississippi and Missouri are lower. Cigarette tax revenues don't even come close to offsetting the high total cost of smoking: Kentucky's cigarette tax generates \$170 million a year in state revenue, less than 5% of the estimated \$3.6 billion in annual smoking-related costs.

Raising the Tobacco Tax Reduces Smoking and Saves Lives

Studies show that significant cigarette tax increases reduce smoking and are especially effective at reducing smoking among children. Research at the University of Chicago shows that every 10% increase in the price of cigarettes reduces youth smoking by about 6.5% and overall cigarette consumption by about 4%. The formula is simple—a higher tax means fewer children start smoking, fewer pregnant women pick up a cigarette, more smokers quit and more lives and medical costs are saved.

The Campaign for Tobacco-Free Kids has estimated the public health and economic benefits of raising Kentucky's cigarette tax.

These estimates clearly show that the benefits of raising Kentucky's tax closer to the national average (a 70¢ per pack increase) are almost two and a half times greater than those resulting from a lower increase of 30¢:

- The lives of 18,300 children will be saved (10,500 more than a 30¢ increase);
- Over 9,000 fewer adults will die from smoking (5,400 more than the lower increase); and
- \$1.34 billion will be saved in smoking-related health costs (\$770 million more than the lower rate).

The Public Health and Economic Benefits of Increasing Kentucky's Cigarette Excise Tax

Benefit	30¢ Per Pack Increase	70¢ Per Pack Increase
Reduction in Youth Smokers	7.4% (24,500)	17.2% (57,300)
Future Youth Smoking Deaths Avoided	7,800	18,300
Lifetime of Health Savings from Reducing Youth Smoking (Millions)	\$428.8	\$1,002.8
Reduction in Adult Smokers	1.7% (15,500)	4.0% (36,200)
Future Adult Smoking Deaths Avoided	4,100	9,500
Lifetime Health Savings from Reducing Adult Smoking (Millions)	\$147.3	\$343.9
Overall Long-Term Health Savings (Millions)	\$576.0	\$1,346.7

Source: Campaign for Tobacco-Free Kids, Eric Liebman, 2008

It is also important to note that the public health and financial benefits from a lower cigarette tax increase (such as 30¢) are much less certain than those resulting from a larger increase. Here's why: Faced with a relatively small tax increase, cigarette companies can reduce or eliminate any resulting decline in smoking (and related public health benefits) with temporary price reductions or retailer discounts. This is what happened the last time Kentucky's tax was changed. In contrast, a larger tax increase (50¢ cents or more) is more difficult for cigarette companies to offset effectively with such practices.

Impact on Farmers Will Be Minimal

Tobacco is increasingly sold in a global market. The U.S. Department of Agriculture estimates that 69% of the annual sales of U.S. burley are to foreign cigarette manufacturers and that 20% of all American manufactured cigarettes are exported overseas. This means that the vast majority of U.S.-produced tobacco is sold abroad and is not subject to state taxes on cigarettes. It is also important to consider that, even though the per capita rate of smoking is high in the Commonwealth, Kentucky smokers overall represent less than 2% of all smokers in the United States. The bottom line: Because less than a third of the burley produced in the U.S. stays here and Kentuckians consume less than 2% of

U.S. cigarettes, any reduction in smoking caused by increasing the tobacco tax will have little impact on Kentucky tobacco farmers. The Campaign for Tobacco-Free Kids has estimated that totally eliminating cigarette sales in Kentucky would reduce the overall demand for U.S. burley by less than 2%.

Tobacco Taxes Increase State Revenue

Increasing tobacco taxes has proven to be a reliable source of revenue for states. A total of 43 states and the District of Columbia have increased cigarette taxes since January 1, 2002—more than doubling the national average cigarette tax from 43 cents to \$1.11 per pack. A 2003 study by RTI International found that states that have significantly increased their tobacco tax have experienced substantial increases in revenue despite a decline in tobacco consumption.

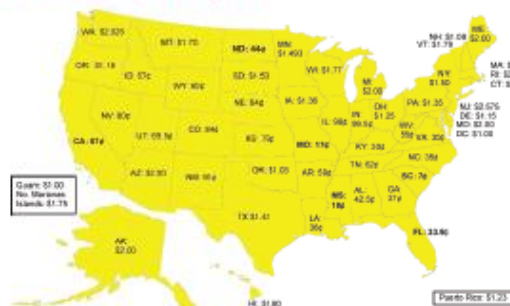
Impact on Low-Income Kentuckians

Critics of increasing the tobacco tax argue that its impact would be greatest on lower-income people, thereby making it regressive. In reality, cigarette tax increases offer one of the best ways to help low-income families with one or more smoking members to reduce or eliminate smoking-related health risks and their related costs. If family members stop smoking because of the higher cost, the result will be less spending on cigarettes and greater savings on health care—both positive financial benefits for a lower-income household.

Public Support for Raising the Cigarette Tax

More than eight in ten Kentucky voters (83%) surveyed in the fall of 2007 were concerned about smoking and tobacco use among young people. By nearly a two-to-one margin (60% to 33%), Kentucky voters support a 75¢ per pack increase in the cigarette tax. This support is bipartisan as 63% of Democrats and 58% of Republicans surveyed favor the increase. A majority (62%) say they favor increasing the cigarette tax to help balance the state's budget. A wide array of health groups also support cigarette tax increases, including the American Cancer Society, American Heart Association, American Lung Association and Campaign for Tobacco-Free Kids.

Map of the Current Tobacco Tax: The average state cigarette tax in the U.S. today is \$1.11 per pack



1a. What is the Health Problem / Outcome?

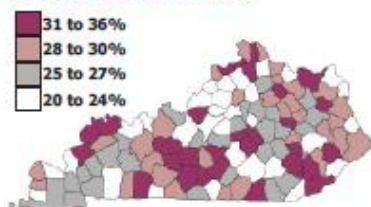
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Map

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1b. What is the Primary Cause?

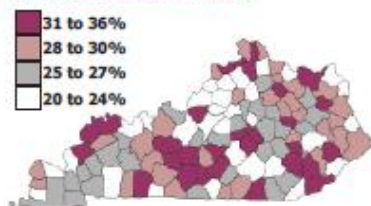
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- Employee insurance (treating)
- Health care (treatments and)

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2. Qualify the Problem: Who & Where?

- **Low rates of measles vaccination *in school-aged children in District X***
- **Asthma *in children <5 years in District Y***
- **Missed work days due to respiratory illness *among adults in County Z***
- **Traffic injuries and deaths *among adults and children in Country N***

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3. Quantify the Problem: How Much & When?

- **Ex: Low rates of measles vaccination → measles outbreaks**
 - An average of three outbreaks of measles in school-aged children per year in District X since 2010
- **Ex: Air pollution from a coal plant → respiratory disease and missed work**
 - Asthma in 17% of school-aged children in County Y
 - Adults living <10 km from the coal plant were twice as likely to have missed workdays due to respiratory illnesses as persons living 10 km or more away in 2016
- **Ex: Lack of seat belt use → traffic injuries and deaths**
 - >650 injuries and 93 traffic deaths among people not wearing seatbelts in City Z over the past two years

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- Pregnant women in Kentucky smoke at a rate—one out of four pregnant women—higher than the national average.
- Almost half of smokers, 47.7%, have smoked for 10 years or more.
- Over 45% of Kentucky children live in a household where someone smokes, compared to a national average of 35%.

The High Cost of Smoking—Even Higher in Kentucky



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Cigarette Excise Tax

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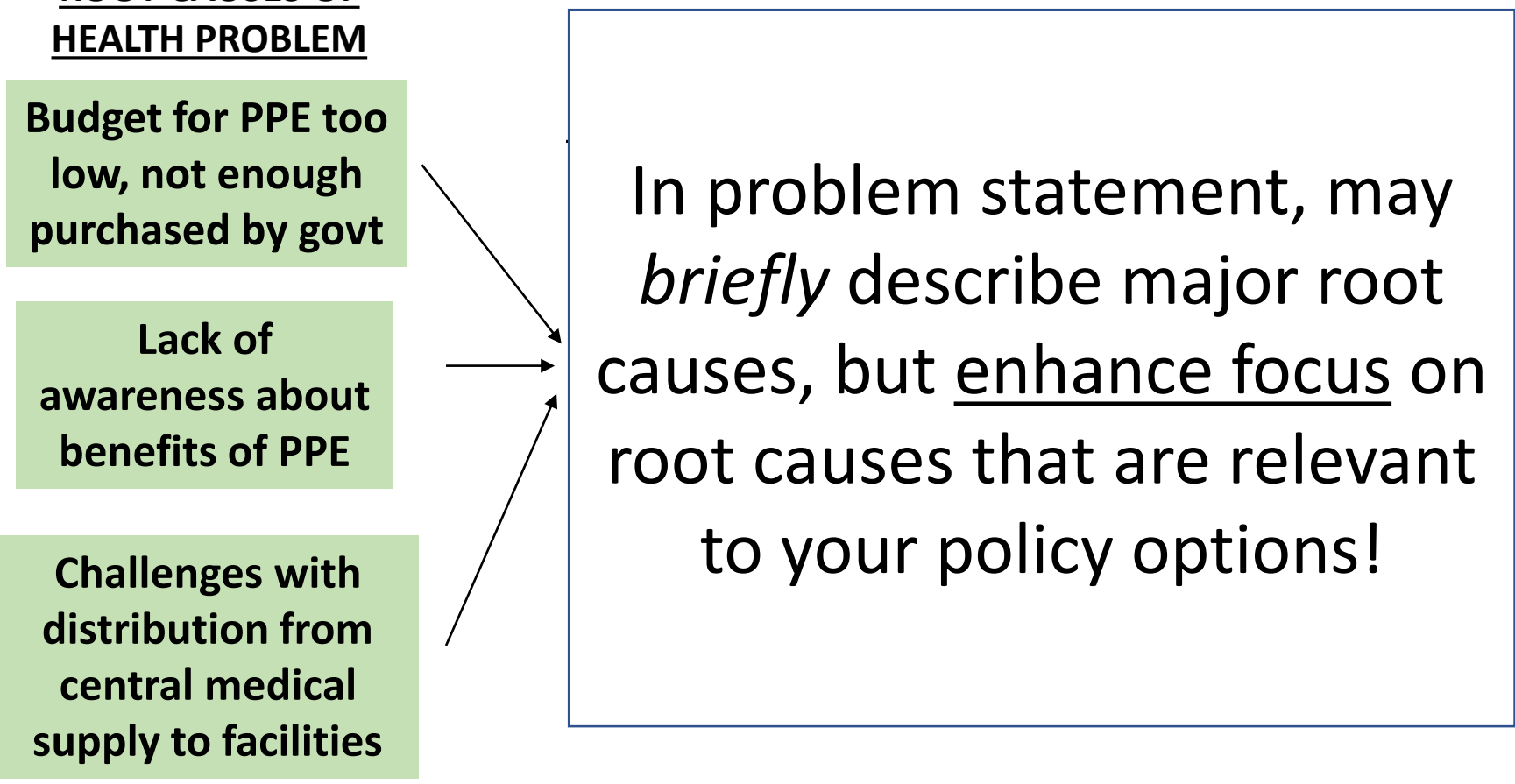
4. What are the Root Cause(s)?

ROOT CAUSES OF HEALTH PROBLEM

Budget for PPE too low, not enough purchased by govt

Lack of awareness about benefits of PPE

Challenges with distribution from central medical supply to facilities



In problem statement, may *briefly* describe major root causes, but enhance focus on root causes that are relevant to your policy options!

The diagram consists of three light green rectangular boxes on the left, each containing a root cause. Three black arrows originate from the right side of these boxes and point towards a large white rectangular box on the right. The top arrow points from the 'Budget for PPE' box, the middle arrow from the 'Lack of awareness' box, and the bottom arrow from the 'Challenges with distribution' box. The large white box contains the instruction text.

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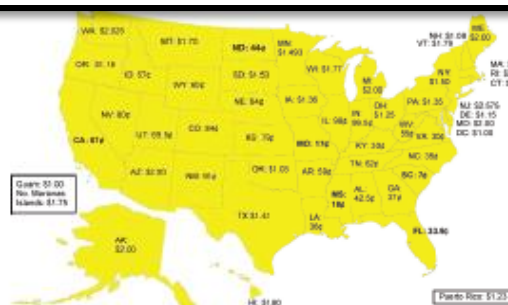
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5. Expanding on Your Thoughts

- **Answering the previous questions builds a foundation for your problem statement – now flesh it out!**
- **Expanding on your thoughts will occur throughout the policy brief-writing process**
- **Pay specific attention to quantifying the problem using existing data!**
 - Data about the size of the problem
 - Data about the problem's impact
 - Health and costs



Review Question: Purpose of a Problem Statement

Q: What is the purpose of a problem statement? (select one)

- ☐ To convince your reader of the importance of a problem
- ☐ To present policy options to fix the problem
- ☐ To show the costs of different policy options
- ☐ To make recommendations about the problem

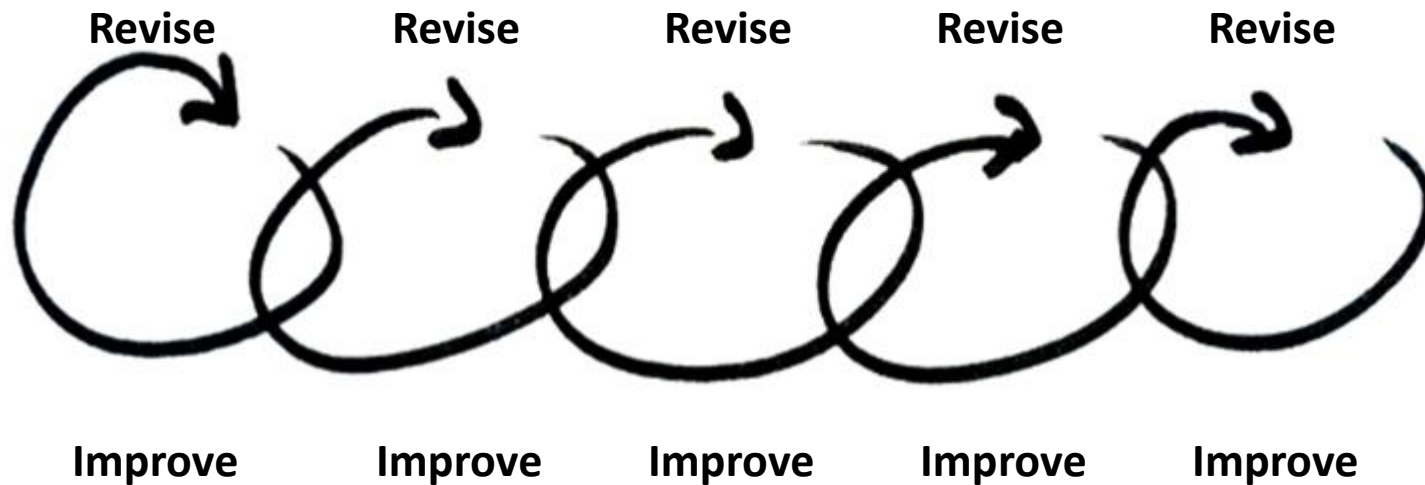
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Writing a Problem Statement is Iterative!

- Don't expect it to be perfect on the first – or even second or third – try!
- You will continually refine your problem statement



Other Key Aspects of Problem Statement

- **Clearly written**
- **Concise: No more than 3 or 4 paragraphs**
- **Supported by visual representations of the problem**

Visual Displays of the Problem

- **Charts, graphs, maps, figures**
- **Goal:**
 - Make the problem as simple to understand as possible
 - Demonstrate clearly the impact of the problem

Remember: A problem statement is a story to convince policymakers about the importance of your problem!

Visual Displays of the Problem

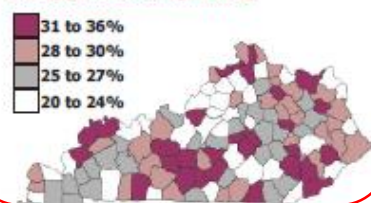
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At 30 cents per pack, Kentucky's cigarette tax is lower than five of its seven bordering states and ranks 47th in the nation—only South Carolina, Mississippi and Missouri are lower. Cigarette tax revenues don't even come close to offsetting the high total cost of smoking: Kentucky's cigarette tax generates \$170 million a year in state revenue, less than 5% of the estimated \$3.6 billion in annual smoking-related costs.

Raising the Tobacco Tax Reduces Smoking and Saves Lives

Studies show that significant cigarette tax increases reduce smoking and are especially effective at reducing smoking among children. Research at the University of Chicago shows that every 10% increase in the price of cigarettes reduces youth smoking by about 6.5% and overall cigarette consumption by about 4%. The formula is simple—a higher tax means fewer children start smoking, fewer pregnant women pick up a cigarette, more smokers quit and more lives and medical costs are saved.

The Campaign for Tobacco-Free Kids has estimated the public health and economic benefits of raising Kentucky's cigarette tax.

These estimates clearly show that the benefits of raising Kentucky's tax closer to the national average (a 70¢ per pack increase) are almost two and a half times greater than those resulting from a lower increase of 30¢:

- The lives of 18,300 children will be saved (10,500 more than a 30¢ increase);
- Over 9,000 fewer adults will die from smoking (5,400 more than the lower increase); and
- \$1.34 billion will be saved in smoking-related health costs (\$770 million more than the lower rate).

The Public Health and Economic Benefits of Increasing Kentucky's Cigarette Excise Tax

Benefit	30¢ Per Pack Increase	70¢ Per Pack Increase
Reduction in Youth Smokers	7.4% (24,500)	17.2% (57,300)
Future Youth Smoking Deaths Avoided	7,800	18,300
Lifetime of Health Savings from Reducing Youth Smoking (Millions)	\$428.8	\$1,002.8
Reduction in Adult Smokers	1.7% (15,500)	4.0% (36,200)
Future Adult Smoking Deaths Avoided	4,100	9,500
Lifetime Health Savings from Reducing Adult Smoking (Millions)	\$147.3	\$343.9
Overall Long-Term Health Savings (Millions)	\$576.0	\$1,346.7

Source: Campaign for Tobacco-Free Kids, Eric Liebman, 2008

It is also important to note that the public health and financial benefits from a lower cigarette tax increase (such as 30¢) are much less certain than those resulting from a larger increase. Here's why: Faced with a relatively small tax increase, cigarette companies can reduce or eliminate any resulting decline in smoking (and related public health benefits) with temporary price reductions or retailer discounts. This is what happened the last time Kentucky's tax was changed. In contrast, a larger tax increase (50¢ cents or more) is more difficult for cigarette companies to offset effectively with such practices.

Impact on Farmers Will Be Minimal

Tobacco is increasingly sold in a global market. The U.S. Department of Agriculture estimates that 69% of the annual sales of U.S. burley are to foreign cigarette manufacturers and that 20% of all American manufactured cigarettes are exported overseas. This means that the vast majority of U.S.-produced tobacco is sold abroad and is not subject to state taxes on cigarettes. It is also important to consider that, even though the per capita rate of smoking is high in the Commonwealth, Kentucky smokers overall represent less than 2% of all smokers in the United States. The bottom line: Because less than a third of the burley produced in the U.S. stays here and Kentuckians consume less than 2% of

U.S. cigarettes, any reduction in smoking caused by increasing the tobacco tax will have little impact on Kentucky tobacco farmers. The Campaign for Tobacco-Free Kids has estimated that totally eliminating cigarette sales in Kentucky would reduce the overall demand for U.S. burley by less than 2%.

Tobacco Taxes Increase State Revenue

Increasing tobacco taxes has proven to be a reliable source of revenue for states. A total of 43 states and the District of Columbia have increased cigarette taxes since January 1, 2002—more than doubling the national average cigarette tax from 43 cents to \$1.11 per pack. A 2003 study by RTI International found that states that have significantly increased their tobacco tax have experienced substantial increases in revenue despite a decline in tobacco consumption.

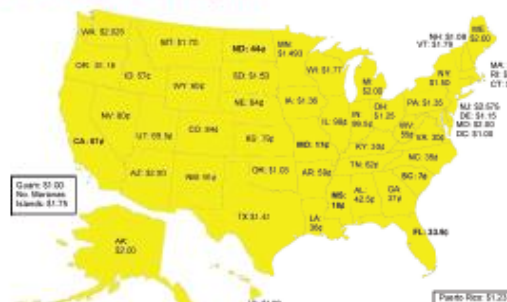
Impact on Low-Income Kentuckians

Critics of increasing the tobacco tax argue that its impact would be greatest on lower-income people, thereby making it regressive. In reality, cigarette tax increases offer one of the best ways to help low-income families with one or more smoking members to reduce or eliminate smoking-related health risks and their related costs. If family members stop smoking because of the higher cost, the result will be less spending on cigarettes and greater savings on health care—both positive financial benefits for a lower-income household.

Public Support for Raising the Cigarette Tax

More than eight in ten Kentucky voters (83%) surveyed in the fall of 2007 were concerned about smoking and tobacco use among young people. By nearly a two-to-one margin (60% to 33%), Kentucky voters support a 75¢ per pack increase in the cigarette tax. This support is bipartisan as 63% of Democrats and 58% of Republicans surveyed favor the increase. A majority (62%) say they favor increasing the cigarette tax to help balance the state's budget. A wide array of health groups also support cigarette tax increases, including the American Cancer Society, American Heart Association, American Lung Association and Campaign for Tobacco-Free Kids.

Map of the Current Tobacco Tax: The average state cigarette tax in the U.S. today is \$1.11 per pack



Visual Displays of the Problem

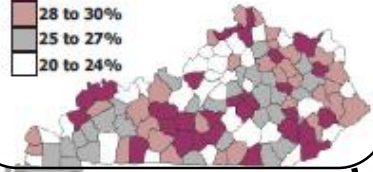
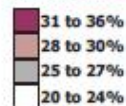
Smoking in Kentucky—We're Number 1!

A 2007 assessment of Kentuckians' health by the Institute of Medicine at the University of Kentucky confirmed a grim statistic—Kentucky leads the nation in smoking.

- Kentucky ranks first in the nation in the percent of adults who smoke. More than 29% of adult Kentuckians smoke (876,000 people) compared to 21% nationally.
- An estimated 25% of high school students (53,000 students) also smoke compared to 23% nationally.
- Pregnant women in Kentucky smoke at twice the national rate—one out of four pregnant women (26%) smoke in Kentucky.
- Almost half of smokers, 47.7%, have tried to quit.
- Over 45% of Kentucky children live in a household where someone smokes, compared to a national average of 29.5%.

The High Cost of Smoking—Everyone Pays

Percent of Adults Smokers in Kentucky by County (National Average is 21%)



Source: The Health Assessment of KY: A County Assessment, KY Institute of Medicine, 2007

Leading the nation in smoking exerts a high price for Kentucky, in both lives and dollars.

- The U. S. Centers for Disease Control and Prevention (CDC) reports that, with an average of 7,700 smoking-related deaths each year, Kentucky has the country's highest rate of deaths attributable to smoking.
- The UK study found that more than half of all smokers will die of a smoking-related illness.
- UK researchers also report that 23% of all deaths in Kentucky are attributed to smoking.
- The Kentucky Department of Public Health reports that smoking during pregnancy can cause low birth weight babies, pre-term deliveries, increased risk for miscarriage, SIDS, fetal growth retardation, spontaneous abortions, cleft palates and lips, and childhood cancers.
- The CDC estimates that the total annual cost of smoking in Kentucky is more than \$3.6 billion (\$1.5 billion in smoking-related medical costs and \$2.1 billion in lost productivity due to premature deaths from smoking).
- It's not just smokers who pay these costs. The 71% of Kentuckians who do not smoke must also foot the bill.
- Taxpayers pay more than \$480 million each year in smoking-related health costs in Kentucky's Medicaid program.

- Employers and consumers pay higher health care prices and insurance premiums to cover the \$1.5 billion annual cost of treating smokers.

• High school students in Kentucky pay more for health insurance than students in other states.

Raise the age of legal smoking to 21. Studies show that raising the age of legal smoking to 21 would reduce smoking among children and adolescents by about 10%.

The CDC reports that the health benefits of increasing the age of legal smoking to 21 would result in a 10% reduction in smoking-related deaths.

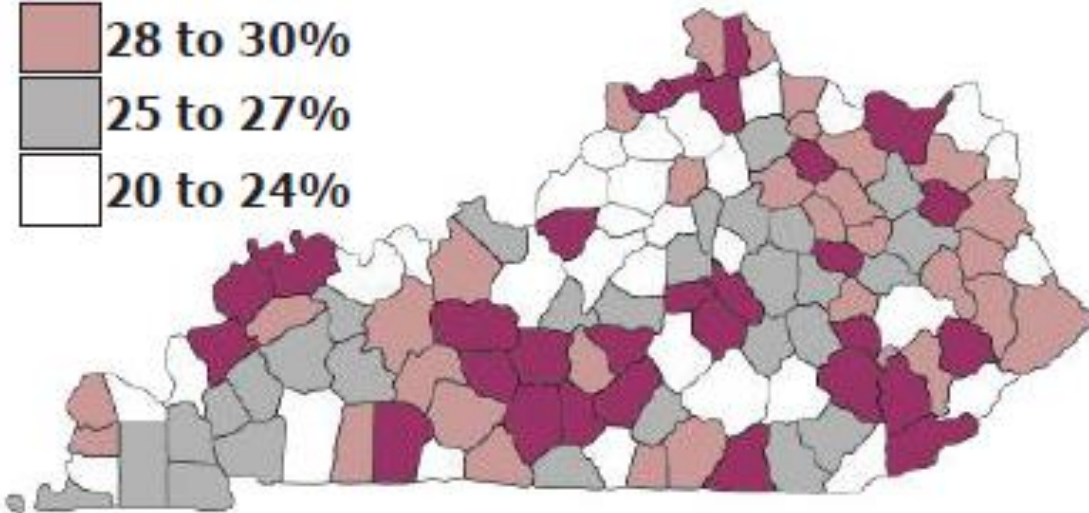
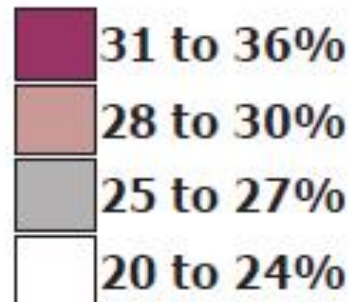
- The CDC reports that the health benefits of increasing the age of legal smoking to 21 would result in a 10% reduction in smoking-related deaths.

The Public Health and Economic Benefits of Increasing Kentucky's Cigarette Excise Tax

Benefit 30¢ Per Pack Increase 70¢ Per Pack Increase

The High Cost of Smoking—Everyone Pays

Percent of Adults Smokers in Kentucky by County (National Average is 21%)



Source: The Health Assessment of KY: A County Assessment, KY Institute of Medicine, 2007

2 The Price of Smoking • Kentucky Voices for Health

The Price of Smoking • Kentucky Voices for Health 3

argue that its impact would
thereby making it regres-
sion one of the best ways to

Case Study

Case study exercise

- **You have already discussed the root causes in the previous section of the case study. Review the additional information and answer Question 4:**
 - Qualify the problem:
 - Who is affected by the problem?
 - Where is the problem present?
 - Quantify the problem
 - How much?
 - When?

Did you answer the case study questions?



Case study exercise

- **Who is affected by the problem?**
 - Motorcyclists and their passengers are affected by the problem.
- **Where is the problem present?**
 - Although the problem is described in Ho Chi Minh City, it is likely present throughout Vietnam.
- **How much?**
 - In HCMC, we can estimate that ~50,506 female riders and 74,007 male riders, or about 124,000 total riders, wear helmets. Based on the NTSC study, we can calculate the ~12,000 riders wear certified helmets, while the remaining ~112,000 wear uncertified helmets.
 - We know that 95% of all registered vehicles in Vietnam are motorcycles, suggesting that they are common. We would need additional data if we wanted to indicate the numbers of persons potentially affected (ie, motorcyclists) throughout the country.
- **When?**
 - This is an ongoing problem.

END