Hi and welcome to your lecture on the introduction to community health. I am Dr. Heather Blunt and I will be presenting this lecture to you today.

Slide 2: Learning Objectives

The learning objectives for today are to understand the definition of health; to identify some of the main public health achievements over the past century; to explain the difference between individual and community health; and to understand community health through an applied example. So by the end of the lecture, these are the learning objectives that you should be able to accomplish.

Slide 3: Outline

So it's a little more detailed outline for the lecture for today. You will learn the definition of health; the definition specifically of community health; some of the major public health influences on community health throughout history; what impacts community health; and go through an applied example.

Slide 4: Health

So when we think about health, several things might come to our minds. We might think about seeing a doctor on a regular basis or perhaps only when we are sick. We may think about eating right, including fruits and vegetables and exercising in order to maintain a healthy weight and strong muscles. We might also think about getting enough sleep or how sleep or lack of sleep may impact our health. And perhaps other behaviors that we engage in and how they might jeopardize our health as well. So smoking, drinking, overall substance abuse or other health behaviors like using seat belts or helmets when we perhaps ride a bike.

Slide 5: Definition of Health

According to the World Health Organization, health is a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity. Infirmity refers to physical or mental weakness, such as what may happen naturally when we are aging. This definition the World Health Organization put together in 1948 and it has remained the same throughout the whole time. Even at that time, they recognized the fact that health was not just a physical thing, it was not just a mental thing, but also included social well-being. And that's going to be a lot of what we talk about today in this community health lecture.

Slide 6: Definition of Health

So specifically, we want to take this individualized sort of definition of health and apply it to a community level, where we are talking not just about an individual's physical, mental, and social well-being, but also the physical, mental, and social well-being of a community.

Slide 7: What is Community Health?

So we may start out by thinking what is community health, and how does community health differ from individual health? Well community health is referred to as the health status of a defined group of people and the actions and conditions that promote, protect, and preserve their health.

Slide 8: What Makes a Community Healthy?

So what makes a community healthy then? As the chapter that you are reading for this week outlines, a healthy community includes that ability to assesses their own needs and resources; the infrastructure and policies that support health; and the essential public health services being accessible to the people within the community. So for example there being accessible quality health care within the community that the community has the ability to assess their own needs and resources and determine what they need in order to maintain health. Also making sure that the infrastructure and the policies are in place that support people, and people are living healthy lives.

Slide 9: Major Public Health Events - Community Health

Here on this slide you see some of the major public health events over history that have had some sort of an impact on community health. So starting from 1796 when the smallpox vaccine was developed, that really had an impact on community health because not only were we vaccinating individual people, but the more people who were vaccinated, the more sort of protection the rest of the community had from the smallpox virus as well. In 1854 when the Broad Street water pump had the handle removed, this was John Snow who originally identified that this particular water pump was helping to spread cholera throughout the community. So again this sort of single event of removing the handle from that particular water pump really had an impact on the community's health by decreasing the spread of cholera within that community.

In 1902, the first national level public agency was developed. And in 1911 the first local health department was developed. These things both really serve for community and population level health, where they are serving individuals but they really are working within the community and working with the people of the community to try and improve the health of everyone within that community. In 1965, you may know the Medicare and

Medicaid bills were passed, which again really helps with community health, specifically with communities of people who are poor or in poverty with the case of Medicaid, or in the case of Medicare, whole communities of seniors or residents who are over the age of 65. So these two things really helped with improving health care to those particular communities as well.

And then in 1979, the first Healthy People was published. As you may know how, we are working on Healthy People 2020, so several years you know from the initial Healthy People being published. But in 1979 was the first time we sort of took an actual publication of Healthy People and outlined goals, not just for individuals' health but also for health as a population and as a community. So these are just a couple of public health events that have really sort of impacted community health on a broad level throughout history.

Slide 10: Shifts in Causes of Death

So obviously here this is a very basic representation of the shift in major causes of death over time. These major public health events of the past several decades have led to significant changes in population and community health and in overall causes of death. So for example improvements in sanitation and in medicine have made a large impact on infant and maternal mortality rates so that more of the babies that are born today survive and live to grow up into adulthood. The development of vaccines and improved management of diseases has helped to decrease the incidence of communicable diseases within the communities. So now today, the main causes of morbidity and mortality are chronic conditions, that are due primarily to lifestyles that we live today. So for example busy, overworked, lack of sleep, poor behavioral habits, some of the things that we thought about on that first slide when we were thinking about health. And these conditions tend to lead to, or these behaviors tend to lead to disease such as cancer and heart disease. So the good news is that many of these issues can also be managed by behavioral or lifestyle changes. And this has been really one of the main shifts in the causes of death and mortality and morbidity within our community.

Slide 11: What Impacts the Health of a Community?

So now that you understand a little bit more about what community health really is and how it differs just from individual health, we will look at some of the ways that community health is impacted. One of those ways is through the individuals in the community. So certainly the behaviors, and the values, and the actions of individuals within the community have an impact on the community as a whole. So if community tends to be, or an individual within a community tends to be very active and sort of very social, this is going to have an impact on the community as well. In addition, thinking back to when we were talking about the smallpox vaccine, again just one person being vaccinated helps protect the whole community from acquiring that virus as well. Additionally, the interactions between individuals within the community are also very important. And you will learn more about all of these things as you go through the course this semester. But the interactions between these people, for example, social support or having a cohesive or sort of supportive community really does help in terms of the whole overall community health. Additionally, if you have individuals within the community that are engaging in violence, this can also have a negative impact on the community health in general. So those are some of the ways the individuals and their interactions can impact the community and the community's health as a whole.

Slide 12: What Impacts the Health of a Community?

So moving on to beyond sort of just the individuals, the physical and social environment of a community has a big impact as well on the community's health. You can see in the picture here that we have sort of a nice park with open spaces, lots of trees and green grass, as well as a playground for children to play in. This sort of environment not only allows for children within the neighborhood to be active and to be outside and getting some fresh air, where we've got you know some good air quality with open spaces and trees and green grass, but it also really serves as sort of a gathering point for parents and their children to come together and sort of as the children are playing, often times the parents are talking to each other and really just sort of upholds that feeling of a community and that sort of community support and buying into sort of the community as a whole.

Then the next bullet point on this slide is talking about the organization of the community. When we talk about organization, it's not necessarily how the houses are set up or how the streets are set up or that kind of organization that you may think of in a typical definition of organization. But we are really referring primarily to the organizations within a community. So for example, schools and the fact that schools, whether or not schools are located close to neighborhoods or close to the residents where people can easily get their children to school; whether there is a good bus system for the children in order to be able to get to school and those types of things. So really making sure that those fundamental structures and organizations that are important within the school are there in a way that can be easily accessed and is supportive of allowing children to go to school and to accomplish those sorts of things.

Slide 13: What Impacts the Health of a Community?

Then on this slide, we are talking even more broadly in terms of rules and policies that may impact the health of a community. So for example here we have a speed limit sign. So often times it may be sort of local policy makers or local law enforcement that will determine speed limits for certain roads. You may see sometimes that are on roads that are next to a school, there is a specific sort of school zone with a lower speed limit throughout those zones. These kinds of rules and policies also really help to impact our community health. Additionally, certain communities and if you think of the USF community here on campus, you may see certain places that are actually designated as non-smoking areas. These types of things or these types of rules can also impact a community's health. If you think about people who are non-smokers and who want to be sort of around buildings or within open areas within the community, if you have designated non-smoking areas, they aren't exposed to second hand smoke. And certainly this at a national level is being enforced in local restaurants and bars and other sort of public establishments, which has been going on for quite some time now. But for a long time, people were allowed to smoke in restaurants and in bars and really had a big impact of exposing others within the community to their second hand smoke. So additional rules and policies such as these can also help with the community.

Slide 14: Community Health Activities

So in addition to individuals and their interactions and the overall setting and parks and schools and rules and regulations within a community, there are certain activities that people within a community can do that are really going to help improve a community as a whole. So for example on this slide we have several pictures. On the top left is a slide where we have people working together to clean up a community by picking up trash. So this helps the whole community be cleaner and healthier, removing the trash along with potentially dangerous materials such as broken glass or rotting foods which will help keep rodents away, many of which may cause or carry diseases. We also on the bottom left corner have people lined up waiting for a flu drive. Again we have the idea that the more people within the community who receive a flu shot, the less susceptible the overall community is to acquiring that disease.

On the top right the use of stop signs and appropriate transportation procedures within a community including bicycle safety as shown here are additional measures that can help a community really protect their members and keep everybody safe and healthy. And finally the last picture on the slide is of an organized community run or race. Organizing events like this that help bring community members together, and particularly being physically active, is a great way to help influence the health of a community as a whole. So really getting the whole community's buy in into these types of activities. So, sure one person picking up trash or getting a flu shot or running a race may be certainly good for their own health, really having the community buy in and having groups of people within the community really care about their community and engage in particular activities or behaviors that are going to help the community as a whole. So every sort of individual is coming together in smaller groups to really benefit the community at large is really one of the ideas behind this slide here.

Slide 15: Thinking About Your Community

So now I want you to take a moment to think about your community. So thinking about

the things that we have talked about already, and the different resources the community has, how socially cohesive the community is if you have friends, that sort of support within your community, access to safe places and to convenience to schools or workplace, all the things we have sort of talked about up until this point, how would you rate your own community in terms of their health? And then additionally, your turn you can name a few things that your community has that helps keep your community residents healthy. So this may be particular activities that you can engage in or particular resources your community may have or a particular really close knit group of people, but thinking about a few things within your community that helps you to stay healthy.

Slide 16: Thinking about Your Community

Okay, so now that you wrote down your ideas of things that might help keep your community healthy, did you think about how people around you influence your physical activity and eating habits? Generally, do you see lots of people out and about and being physically active in your community? Does your community have access to safe walking or biking areas that may impact your physical activity? Do you have access to resources, such as for example here on campus, we have the rec center on campus. Also from your home within your community, do you have a way to travel safely to your workplace? Can you bike to work? Can you walk to work? Do you have a safe way to get to work? What food choices are available to you in your community? Do you have access to fresh fruits and vegetables, maybe at a farmer's market or at local grocery stores, or is primarily the food that's available around your area fast food or convenience type of food?

And then finally, is there access to doctor's offices and doctors' offices which accept certain health insurances? Do typically people within your community pay attention to their health and really seek help when they may be having failing health, versus really sort of leaving things to deteriorate. So hopefully in your thinking about things that impacted your community, you are able to come up with some of these ideas.

Slide 17: Applied Example: Obesity

So now that we have the basis for understanding of what community health is and some of the things that may impact community health, we are going to talk specifically about the example of obesity. And throughout this whole semester, you are really going to be looking at obesity as an example of all of the different lectures that you have throughout the course. So the maps that are shown here on this slide depict from 1990, the year 2000, and then again in 2010 the rise of obesity rates within adults within the US. So you can see across all of the different states really there has been a rise in obesity across all of them. So thinking about where will we be if this trend continues, as you can see from 1990 to 2000 to 2010, if this trend continues, where will we be in 2020? Will all of the states be sort of the dark red color, or what sort of situation will we be in then?

Slide 18: Obesity Prevention

So certainly on an individual level, there are lots of different things that people can do to help combat obesity. But really the research has shown that some of the most successful programs have been community level programs. So let's take a look at how one's community may be involved in the prevention of obesity.

Slide 19: Factors Influencing Community Level Obesity Programs

So on this slide, we are sort of going back to some of the different things that we talked about earlier on in this lecture. So for example the behaviors of individual community members. Are there people within the community, sort of leaders to start the change and sort of take charge and start new programs or lobby for new programs or lobby for changes within the community. Are people within the community engaged in physical activity and in eating healthy and are those sorts of things important to community members? Also that peer and social influence. So family, friends, neighbors, this can also include communities in terms of sort of cultural influences. So certain communities may have particular cultural influences and how did these things perhaps impact the choices of foods that you eat or the choices of physical activity that you engage in, and how might these things have an impact on obesity as well.

The community's physical environment. So again, access to safe places to walk or bicycle areas such as parks where people can go and sort of congregate there, to be physically active and enjoy the natural outside environment and get some fresh air. And also in terms of the policies and regulations. So in this case for example, how late are the lights on the streets open, or rather how late are the lights on the streets kept on? Are parks monitored? Are the parks safe at night? Those sorts of things where are these sorts of policies and regulations also really supporting people being physically active and decreasing their obesity rates as well.

Slide 20: Example Community Strategies

So there are some example community strategies that were put together by the CDC which really recommend a few things in terms of what communities should do to help decrease the rates of obesity. So for example we see examples that communities should improve the availability of affordable healthier food and beverage options within public service venues. So perhaps rather than just having the typical vending machines that often times do not contain very healthy or fresh foods, also having other options that are fresh or healthier options that are available as well. Instituting smaller portion size options in public service venues as well. So often times if you go and get a lunch somewhere, you may really have a large portion of food and really it's kind of been shown that smaller portions of food that you have, really the less you will eat. So with a large portion size, you are more likely to just completely finish the whole portion versus

a smaller size, you may stop when you finish that portion and not actually go back for seconds or need additional food as well.

Improving the geographic availability of supermarkets in underserved areas. So often times there within communities there really won't be a convenient or close available supermarkets which are really primarily carry the fresh fruits and vegetables and the fresh meats and sort of the healthy prepared foods, versus perhaps gas stations or perhaps fast food restaurants or places like that that don't have as healthy of options. They also recommend incentivizing, purchasing food from farms. So a going sort of above and beyond just purchasing from your supermarket, really purchasing fruits and vegetables from local farms or from farmers' markets. It's been shown that often times the produce that comes locally is really going to be the healthiest as it's most likely just picked from the tree or from the bush or wherever it's been growing and makes it to your table much quicker than large supermarkets which may buy their groceries or their produce from other countries and they have to be shipped over, or other states that have to be shipped to you.

Increasing opportunities for extracurricular activity. We have talked a lot about this one as well. So the more that communities can really maximize the opportunities for people to engage in physical activity will really be helpful. And finally going along with this is requiring physical education in schools. So as the government sort of continues to cut PE classes from many of the schools, perhaps the local schools can ensure that during recess or in morning time or after school time that there is really the opportunity for students to engage in physical activity.

Slide 21: Example Program: Shape up Somerville; EatSmart PlayHard

So in this slide, is presented an example program called Shape Up Somerville: EatSmart and PlayHard. This particular program was a community intervention to help fight obesity with younger children. Particularly researchers in the community of Somerville targeted the city's public schools with students in grades 1 - 3 and engaged adults who shaped their daily environments. So teachers, parents, school food service, health care providers, local media outlets, etc., and really promoted specific initiatives that promoted the following changes within the system. First they overhauled the school lunch menus making sure that the school was providing healthy and nutritious options for students at lunch. They included nutrition education curriculum within the schools, so the students in these grades were learning about nutrition and the food pyramid and how to keep themselves healthy and food choices to keep them healthy. They implemented physical activity programs, both in and after school, so making sure that programs were available while children were in school and also that the after school programs that were provided were additionally physical activity type of programs. And then they went beyond actually as well in working with the local area restaurants to offer healthier menu items. So that was a way sort of within the whole community to improve the offering of nutritional food as well.

And the results of this program showed that over two years, school children in Somerville, MA gained less weight and were less likely to be obese or overweight compared to the control communities. The control communities were communities in the similar area but those who didn't actually receive this Shape Up Somerville intervention. So they were really able to show on sort of a broader scale that children in general in this community who had participated in this program really had better outcomes. So this is certainly a bigger impact and a better impact than doing this kind of program just with one person. So making sure that one child at school has a healthy lunch or is taught about education or taught about nutritional education, or has access to physical activity programs, making sort of these larger scale community level changes really made quite a difference for the children in this community.

Slide 22: Greenfield Walking Group Example

Now on this slide, as you click on the box in the middle of the slide, you will see a short video basically highlighting also a walking group example in the city of Greenfield. You will see here how it really sort of only took a couple of people to really build up this particular area and start this initiative of this walking group. So I will give you a few minutes to watch that video now.

Video: The Central California Regional Obesity Prevention Program is a program of the public health institute. This valuable work is made possible with support from the California Endowment and the Robert Wood Johnson Foundation.

A healthy lifestyle doesn't just happen overnight. It's achieved one step at a time, through the choices we make as individuals and as members of a community. Take the Greenfield Walking Group. They have inspired others to take back their neighborhood park and create changes that make it safer and easier to be physically active.

For me it's like my second family, that's how I feel, I am already looking forward to tomorrow so I can brighten their days. To hug each other, to fellowship, that motivates us to be more healthy. To go forward and not fall into depression. Here depression goes away and everything goes away.

This group has been meeting at Stiern Park since 2006, working on ways to create a safer park and get fit. It's something that started with individual goals to help improve fitness, but soon grew into a true grassroots community campaign.

They finished the nutrition class and this was the natural step for them. They were ready to take that next step of putting what they learned in education now into practice. Just amazing natural leaders said yeah we are ready to do this.

It was at that point that women started walking the park. But what they experienced was

not at all inviting. If you saw this park 4 years ago, you would be amazed. Drug and needle paraphernalia, graffiti on the walls, broken glass, loose dogs, it just was not a safe place. So safety was a real issue in this park and these women in the last 4 years have transformed this park to an incredibly busy busy place.

The Greenfield walking group organized their friends and community members to help clean up the park. Crop provided support and connections to help with graffiti abatement, animal control, and park improvements, such as a walking path and new playground equipment.

Crop has helped us a lot. They have really supported us. They are always taking care of us of what we need. They are always looking out for the good of the people and families. My husband also supports me and encourages me to come here.

Today families take full advantage of the park, walking, playing, and organizing aerobic and zumba classes. It has turned this park into a place where people feel safe, where they want to go with their families, and where they get up and get active. It's changed their lives.

When I got here, I didn't know how to eat. I didn't do any activities. I have a 9 year old girl and she's obese. When she was born she was overweight. I always fed her from the first place I saw on the street, until I learned about nutrition. I started to take her with me on walks and now thanks to god she's a normal child. She exercises now. I take her to zumba classes and I help her out.

So it went from a group who simply wanted to walk to be safe in the park to really transforming to health in all. So they have taken an active role. Diabetes in some cases is better management, blood pressure medication is less. So it went from being inactive to physically active to better health.

The success of the Greenfield walking group is inspiring and a real model for other communities. It shares an important lesson with others about the kind of actions and community changes we need to take in our fight against obesity.

I think what it does is it shows the community that when people say I can't make a difference, I am just one person, now you have got a whole community of people coming together on the ground, grassroots, and if people say education or language is a barrier, I think the Greenfield walking group proves all those barriers are just that they are myths and you can do anything when you want to.

Here's how you can help improve opportunities for community members to engage in safe, physical activity. Ensure that all parks have proper lighting and well-maintained sidewalks or walking paths. Work with public safety officials to ensure that parks and community recreational facilities are safe and that they support physical activity.

Develop a community patrol or park patrol program to help increase safety measures. Prioritize health goals, including access to safe physical activity opportunities in city and county policy making.

End of Video.

Slide 23: What can you do to help make your community happier and healthier?

So hopefully this lecture has helped you understand the importance of community health, versus just individual health, and additionally has hopefully helped you understand how your individual health can impact your community at large. So going forward, I hope that you have the opportunity to think about what you can do to help make your community happier and healthier.