## DR. HARVEY FINEBERG 2011 CALDERONE LECTURE

Good morning, everyone. It won't surprise you to know that we've already heard the two best speeches of the morning, and it was a privilege to sit through. I have to say, Francesca, your words were wonderful. The part that was not exaggerated had to do with my mother, and I want everyone to know what a thrill it is to have my mother as well as my other family members here with me.

You know, if there's any thread that runs through the work that I've done over the years to me it's all about making better decisions, that's the common element. It's about making better decisions in the face of uncertainty. It's about being able to decide and understand the way risk intrudes on our lives and what do we do in response? It's about coming up with the best choices in policy options when we're trying to solve big problems or small. And it's about making the right personal choices, personal choices that have tremendous impact on our health.

Now, the best decision for me that ever happened I think was when my mother decided to have me. And I was the second of three boys, and we're not that unevenly spaced, so I do think it was part of a decision structure, not just, you know, a New Year's Eve indiscretion or something like that. And it was always a pleasure to be able to grow up in a household where although it's often said the middle child has some handicaps, I can see some nodding, some middle children here, but honestly I have to say that I never felt it. I don't think we ever felt any relative advantage or disadvantage because my mother and my father treated every child the same. And it was in that kind of an environment where you were supported and reinforced and enabled that led all of us to grow up to be productive and healthy and satisfied, happy. And after all the whole purpose of public health is to put in place the conditions in a community, in a society, for families, for individuals, where you can grow up and be productive and be loving and be happy, that is the ultimate purpose.

In public health we're often talking about doing more for the health of the whole population. This notion of coping with the entirety of the problem is a very critical part of the mindset of public health. I remember very well one part of my little history which you didn't relate is that I worked in the New York City Health Department, I worked there only as a student, I was there for a summer, and it was a very interesting time in the City, it was a time when the City also was undergoing some organizational changes. And a fellow named Gordon Chase, some of you may remember, was brought in as the head of the health systems at that time, getting started. And the one really critical thing that Gordon Chase brought to me at that time, whether it was a problem about lead, and we heard a little bit about lead poisoning last night, or a problem about educational opportunity or a problem about the environmental hazards or a problem about the safety of everything that you do in the day, Gordon brought the message home that you had to deal with the entirety of the problem, it was not enough to just pick up one piece. And whether we're working today on the problems of AIDS or the problems of tuberculosis, whether we're confronting the challenges of chronic disease which require a very different frame of approach, the key concept of public health is we're going to deal with the entirety of the problem, we're not going to be satisfied to deal with a part. And public health is about thinking very pragmatically, public health is about real solutions to real problems. It's not just in the clouds, it's in the clouds and on the ground. Public health is for people who can have their head in the clouds and their feet on the ground at the same time. Public health is a field that rewards and celebrates the thinkers and doers all in one. And public health in its essence is about preventing illness and disease before it

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starts. The essential strategic idea of public health is the value of prevention.

And in that secret is also the key to a weakness of public health, because when public health succeeds it's invisible. How many of us can count the number of us that did not have a heart attack because we have lived a little better, done a little more exercise, stopped smoking, and so on? Anybody can count who did not? We don't know, we don't know which of us did not. But we know in New York City if you just look at the numbers that there are what, Tom, 350,000 fewer smokers. 450,000. And wait until next year's Calderone Lecture and I think it could be even more. But imagine, 450,000 fewer, and that is a phenomenal achievement. And it's achievement of prevention that will be silent. Is that not right, Sheryl? You're happy, okay. The numbers are great for tobacco in New York City. It's really been a paragon and a leader.

Now what's the problem with that? You know, when we immunize children the success is phenomenal. A study in 2005 suggested that the seven basic immunizations of children in the United States of America every year save an estimated 33,000 lives over the course of the lives of those children who are immunized in that year, 33,000 lives. And on top of that for every dollar that's invested in immunization in the United States we get back \$16.50 worth of value, \$16.50 worth of less cost, \$16.50 worth of more productivity. We get more back than we actually put in. Immunization is a fabulous example of why invisibility can be dangerous. We still have in the United States of America individuals and groups who resist the ideas of immunization because of misplaced fears about the side effects of vaccine. Just this part year the Institute of Medicine completed its most recent rigorous review of potential side effects of vaccines, and there are some that can cause an allergic emergency reaction very rarely. But overall when we looked at 158 combinations of vaccines and effects very, very few were borne out in the scientific literature. And the overall overriding impression from all of this intensive review of the scientific literature is how good vaccines are. And yet we have outbreaks of measles, we have imported cases that lead to side cases of measles, we have pertussis still in outbreaks in this country and elsewhere. Why? Because most people are not aware of the consequences of the failure to immunize.

We had a recent discussion with Bill Fagey [?], one of the legends of public health, and Bill Fagey said he thinks that what we ought to do is have people sign an informed consent that explains why they are not getting immunized. They ought to be able to sign and say, "I understand that I am not protecting my child against this disease. I understand I am putting other children at risk. I understand I am jeopardizing the health of my community." Sign that and then you're excused from getting your immunization. But public health can't always impose, it has to also persuade. And public health has to be able to take advantage of the most powerful tools of persuasion.

I think back to the seven deadly sins. Pope Gregory I about 1,500 years ago articulated the seven deadly sins. Some of you can probably recite them. Lust, that's just the first, gluttony, greed, sloth, wrath, envy, pride. I think we did. Did we get gluttony? Okay, then we got them all. Now I would like to submit that there are also seven deadly sins in public health. Now you might want to start with lust, I understand that, but I'm going to set that aside because I think that it's not always healthy but I've got four others that I want to make sure get in, and we can not overlook sloth, gluttony and greed from the original list. I mean what is it that's keeping us from getting enough exercise? My mother whose age we don't normally divulge but I can tell you that we did celebrate birthday more than a year ago, my mother is swimming every day that's humanly possible to swim. And I tell myself if my mother can swim every day, why is it that I can't find thirty minutes to get exercise? And I try to get reenergized to do my walk for the day and incorporate it into my daily life. But sloth is a problem partly of individuals and partly of convenience,

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partly of convenience. Gluttony, well, overeating is a big problem for our society. The number of pounds we have gained collectively is enough to sink a battleship, and it's a serious problem for health. Greed. Why else are tobacco companies still producing cigarettes if not for greed? Is there any other reason that you could imagine?

Now let me tell you the four others. Ignorance. Ignorance is a deadly sin in public health. It's not knowing, it's not wanting to know, it's misunderstanding, it's not knowing what it is that the evidence shows that is good for us. It's knowable, but we have to also want to know it. Complacency. Complacency is a very serious problem in public health. It's related to the problem of invisibility, but we're complacent about the way the world is. Public health leaders are not complacent, they are restless, they are constantly seeking ways to improve. They embody the expression of John Kennedy when he was asked if he's an optimist or a pessimist, and I think in that answer he said, "I am an idealist without illusions," an idealist without illusions.

So we have so far set aside lust, we had sloth, we have gluttony, we have greed, we have ignorance, we have complacency. What else would you put in? Well, I'll tell you what I put in because you're all thinking at least about it. My sixth deadly sin of public health is timidity, timidity. It's the fear of being opposed, the fear of being wrong, the fear of standing out, it's the fear of making change. It's the opposite of timidity to have decisive leadership, which we need in public health. And the last to me of the seven is obstinacy. It's the reluctance, even if you know what you should do, even if your leaders are trying to lead you, it's that you just don't want to change, you don't want to do the right thing.

And so in public health we've got to figure out ways to overcome these seven deadly sins, we have to figure out ways to make society work even in the face of the tendencies in human nature to take up all of those unhealthy ideas and beliefs. And public health has to do this in good times, which is enough of a challenge. But now, as Francesca was describing, when times are harder economically, how much more of a difficulty is it to overcome these deadly sins? And I would like to suggest to me what I call the triple-A solution to coping with the challenges of public health in time of government austerity.

And the first day A is advocacy. The first A is not afraid to speak out, to organize effectively, to mobilize likeminded citizens to achieve constructive change. Sometimes public health people are too reluctant, I would submit, to speak out on behalf of the public need. Sometimes we're not actually well equipped to do it effectively. We don't have enough money to do it, we're not as well organized to do it. Sometimes we're our own worst enemies because we come across as being too self-righteous and know-it-alls, and the representative of the nanny state that nobody really wants. In his wonderful second book of the history of public health in New York City John Duffy wrote that "the public can stand only so much virtue," the public can stand only so much virtue. So we have to find ways to reach people more effectively through advocacy. And keep in mind Margaret Mead's wonderful observation that "Some say it's not possible for a small group of dedicated people to change the world. Indeed, it is the only way it has changed." So we have to find ways to mobilize. I believe we can learn lessons from others who have been successful. We can learn from Research America, for example, which is a wonderful organization dedicated to research support in the United States and its program called the 435 Program, called that because it is the number of congressional districts in the United States. While public health has certain disadvantages we have some advantages, even though there have been cutbacks and even though some local communities had absolutely abandoned public health, and though there are needs for many more workers in public health throughout the United States and around the world we do have a large number of public health professionals working in every jurisdiction in the United States of America. They could be mobilized, because most successful advocacy at

a national level begins at the local level. So being more effective as spokespersons for the needs is a very critical response in a time of constrained resources.

And the second A is to analyze, analyze because let's face it every bureaucracy has some ineffective elements, some fat that can be pared, some ways that you make the programs more efficient. And in fact, as is sometimes said, never let a good crisis go to waste. There are times when you can take advantage of shortfalls in funding and crises to effect the changes that would otherwise be politically and programmatically unacceptable. But you can make those changes. When the Centers for Disease Control last year, led by Tom Farley's predecessor, Tom Frieden, when the CDC last year lost 11% of its budget, and by the way who knows how much more this year, they were able to reduce 64 million dollars of cost of operations, with inconvenience it is certainly the case, but without any reduction in the effectiveness, any reduction in the effectiveness of their programs. So they found ways to trim and cut without the loss of effectiveness. And that's what we need to do when there is less to go around. And we have to be prepared sometimes to stop doing things completely and sometimes to trim, that everybody feels a little bit of pain and some things we just can not now do with the resources that are available. And we in public health have to be prepared to make those very difficult decisions about what it is today we can least afford to give up, and what it is we can most allow to discontinue. And in the long term we have to maintain the core functions of the protection of safety of people, the core surveillance functions to know what is going on, because you do not when the plane is overweight decide to jettison an engine, you need to choose carefully what cargo can go, and you need to keep always a capacity to know where the problems are arising, because they will also make the case in the next phase when the opportunities become better, and they will become better.

And the third A is action, action that will be creative and utilize the abilities of the larger community to affect the public health improvements that otherwise would not occur and government alone can not do. In communicable disease control oftentimes it is the public health departments that have the primary lead. But when we're dealing with epidemics of chronic disease that have to do with the opportunities for the way our communities are built, and the way our roads are laid out, and the way our food is offered in stores and available in restaurants, when we're thinking about all of those things you can not do it alone as a public health authority, you have to enlist the partnerships of other sectors in society, you have to work hand-in-glove with our health delivery system, you have to work together with manufacturers and purveyors of the foods, you have to work with urban designers who are putting in place the bicycle pathways and other safe ways of walking around the City, you have to be part of the larger fabric of decision making in society in order to be successful for public health. And that idea of partnership is one that has been really wonderfully expressed also here in New York City through the Fund for Public Health. The Fund for Public Health, some of you may not be aware, was established in the City about seven years ago and it represents an opportunity for private sector participation for public health goals. And in this time there's been more than 30 million dollars devoted to dozens of pilot programs which have enabled the City Health Department to do much more than it possibly could. And this represents already a building block for a much expanded role of public-private partnership because public health in the end has to be everyone's business.

And when times are tough, and when the traditional means of action through public health are no longer as available to us we need to turn to more creative ways of reaching the public and persuading them about the things that are important to protect their health. Just this last couple of days the Centers for Disease Control released what is

essentially a comic book. They call it a graphic novella electronically, but it's a comic book by another name, and it's about preparing for the inevitable zombie pandemic. Now the reason they came up with this originally last May was they realized that pandemic preparedness was boring, boring, boring and zombies were great. And so if you had to protect yourself against zombies you were going to get into it. And indeed what they found, and this was just reported actually in the newspapers just today, what they found last May is after they put up the first website and nobody at CDC got fired, that was good, this website which normally, you know, the preparedness websites get a couple of hundred hits, maybe a few thousand, and a couple of comments, this particular website once they started blogging had more than three million hits. And this new comic book is going to, I'm sure, be tremendously popular. And by the way, along the way you happen to learn if you're going to protect yourself against the inevitable zombie pandemic, hey, that's going to work for flu, that's going to work for anthrax, that's going to work for preparedness in any natural disaster because all you've got to do is do the same things to protect ourselves against the zombies, and by the way along the way you will protect yourself against the real threats. Now what's important about that is that it reaches people where they are, it reaches people where they are. And in public health we are often so caught up in statistics, in numbers, we're so trained to think that evidence is not the plural of anecdote, and yet we have to be able to translate that evidence into meaningful ways to reach people where they live. And that translation is all the critical answer. Bill Fagey is fond of telling the story about James Thurber when he was in Paris, and a woman came up to him at a party and said to him, "Mr. Thurber, I want you to know your writing is even funnier in French." And he said, "Yes, it loses something in the original." Public health evidence loses something in the original. We have to be able to translate it effectively. And so if we can find ways to cope with the deficiencies of our success, the invisibility

and the seven deadly sins, if we can advocate more effectively, if we can analyze more critically, if we can act with greater impact, then we will enable public health to thrive, even in times of government austerity.

I'd like to conclude with a quotation from John Duffy's first book reviewing the history of public health here in New York City. And at the end of that he said, "The fight against inertia, apathy and vested interests is one that health-minded citizens have fought throughout recorded history. The success and failures of their predecessors should serve both to encourage and to console the present dedicated band of public health leaders."

So with our best efforts to encourage and console I look forward very much to continued success here in New York City for public health, and through the Mailman School of Public Health's efforts with its students, its research and faculty, to public health leadership here and around the world.

Thank you all very much.