MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON HEALTH AND HUMAN SERVICES

Seventy-Eighth Session
February 6, 2015

The Committee on Health and Human Services was called to order by Chair James Oscarson at 1:32 p.m. on Friday, February 6, 2015, in Room 3138 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. The meeting was videoconferenced to Room 4401 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. Copies of the minutes, including the Agenda (Exhibit A), the Attendance Roster (Exhibit B), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website: www.leg.state.nv.us/App/NELIS/REL/78th2015. In addition, copies of the audio or video of the meeting may be purchased, for personal use only, through the Legislative Counsel Bureau's Publications Office (email: publications@lcb.state.nv.us; telephone: 775-684-6835).

COMMITTEE MEMBERS PRESENT:

Assemblyman James Oscarson, Chair
Assemblywoman Robin L. Titus, Vice Chair
Assemblyman Nelson Araujo
Assemblywoman Teresa Benitez-Thompson
Assemblywoman Jill Dickman
Assemblyman David M. Gardner
Assemblyman John Hambrick
Assemblywoman Amber Joiner
Assemblyman Brent A. Jones
Assemblyman John Moore
Assemblywoman Ellen B. Spiegel
Assemblyman Michael C. Sprinkle
Assemblyman Tyrone Thompson
Assemblyman Glenn E. Trowbridge

COMMITTEE MEMBERS ABSENT:

None

GUEST LEGISLATORS PRESENT:

None

STAFF MEMBERS PRESENT:

Kirsten Coulombe, Committee Policy Analyst
Nancy Weyhe, Committee Secretary
Jamie Tierney, Committee Assistant

OTHERS PRESENT:

Romaine Gilliland, Director, Department of Health and Human Services
Tracey D. Green, Chief Medical Officer, Division of Public and Behavioral Health, Department of Health and Human Services
Christopher B. Smith, Chief, Division of Emergency Management and Office of Homeland Security, Department of Public Safety
Heidi S. Parker, Executive Director, Immunize Nevada
Joseph P. Iser, Chief Health Officer, Southern Nevada Health District
Kevin Dick, District Health Officer, Washoe County Health District
Nicki Aaker, Director, Carson City Health and Human Services
April Tatro-Medlin, Private Citizen, Las Vegas, Nevada

Chair Oscarson:
[Roll was taken. Committee protocol and rules were explained.] We want to make sure that the public is aware that we are engaged in what goes on outside of this building. We are aware there is particular concern about these two topics that we have today, Ebola and the measles. We are grateful for those of you who are here and those of you who testify to let us know what actions are taken and give us more information about what we need to know so we can assure our constituents and the public that we are here and paying attention to what goes on. Thank you, Committee, for allowing me to put this on the agenda in a timely manner.

First, we will have an overview of the Ebola Advisory Task Force by Romaine Gilliland and Dr. Tracey Green.

Romaine Gilliland, Director, Department of Health and Human Services:
In October, the state began taking steps regarding the Ebola concern. The Governor directed the Department of Health and Human Services to form an advisory task force to oversee preparation activities in connection with the Ebola crisis. In late October, task force members were appointed. Dr. Tracey Green agreed to act as the chair, and Chris Smith agreed to act as

vice-chair. I would like to acknowledge their help in moving this effectively forward so that we have a far better understanding of what has occurred. Since being appointed, we have held two meetings, one late in October and one in January. I believe that as a state, we are well prepared. Today, Dr. Green will provide us with a very effective overview of Ebola.

Tracey D. Green, Chief Medical Officer, Division of Public and Behavioral Health, Department of Health and Human Services:
I would like to start with basics because I think it is important that we understand a little bit about the Ebola virus [referred to page 3, (Exhibit C)]. It is a Filoviridae virus, and it is in a class we call viral hemorrhagic fevers. There is a group of viruses that fall into this category. They are very serious viruses, but they are predominately viruses that occur outside of the United States and other countries. In our country, the only two cases we have had were the two that came from Africa into the United States.

Prior to 2013 to 2015, there were many outbreaks of Ebola outside of the United States and primarily in Africa. This is a very virulent virus that has a very high death rate associated with it. Some of that, as you saw in our ability here in the United States to treat and cure individuals, has a lot to do with the availability of appropriate medical resources to care for individuals that are infected by this virus. We have seen that there may be improvements as we get better at treating these kinds of viruses. The United States has deployed a number of military personnel to Africa to begin to develop the medical response team in Africa.

I would like to start by stating we have had no Ebola in Nevada. I think that is very important to understand [referred to page 4, (Exhibit C)]. I would like to discuss the role of the task force and what is currently occurring in Nevada. As you know, much of our current Ebola task force operations are currently devoted to tracking individuals that come from other countries. The individuals that we track are ones traveling primarily from three countries in Africa, that come through either other states or our state, or have been exposed to or been in contact with individuals that have Ebola.

Currently, our state's role is twofold: to monitor and to track. We are monitoring individuals that come to our state and tracking if they leave our state. We primarily look at a 21-day period of monitoring. There are two types of monitoring that we do: active monitoring and direct active monitoring. Active monitoring is for the cases of people who are at low to no risk but have had potential exposure. They may have been in Sierra Leone and come to Nevada, either to stay because they are from here, or because they are traveling through here. Since they have had a contact but are still at low risk, when they

arrive we would be notified that a traveler is coming from Africa into Nevada through our Centers for Disease Control and Prevention (CDC) Epidemic Information Exchange (Epi-X) notification system and whether they are going to northern or southern Nevada. The local health authorities are the agents that track or monitor individuals that arrive in our state. Active monitoring is about a day-to-day check-in. The individuals report to us on a daily basis that they have no symptoms and they have no fever. When they leave their country of origin, they are given a kit that identifies what Ebola symptoms are and what the things are they need to look for, and they come to our country symptom-free.

I would like to make a point about this particular disease. When you are infected with Ebola, you are not likely to be well enough to even travel. It is important to note that when you are truly symptomatic with this disease, you are very, very ill.

The second type of monitoring, which we have not had to do, is what we call direct active monitoring. Direct active monitoring is for individuals that are high risk. An example of a high-risk individual is a caretaker that was in Africa caring directly for a patient that had Ebola, or who has been amongst a family that actually had disease. Direct active monitoring is more inclusive because individuals have to present either by video or in person, they have their temperatures checked on a daily basis, and they have a checklist of symptoms that needs to be followed. We have not had to do any direct active monitoring, but we have had to do some active monitoring.

Since October 2014, we have actively monitored 32 travelers [referred to page 5, (Exhibit C)]. Of those travelers, 27 were in Clark County and 5 were in Washoe County. United States citizens made up 53 percent of those travelers, primarily military or volunteer medical professionals, and 47 percent were non-U.S. citizens. We have not had any direct active monitoring because we have not had any high-risk individuals arriving in our state. I am happy to say we have not had any Ebola in Nevada.

As Director Gilliland stated, we were asked to task and lead an Ebola task force, and I was asked to be the chair and Chief Smith our vice chair [referred to page 6, (Exhibit C)]. The task force was composed of members representing a cross section of stakeholders that would be influential in making decisions for how our state responds to Ebola. There were local health authorities, and all of our health authority officers were a part of the team. We have representation for both rural and urban hospitals, nurse practitioners, physicians, surgeons, emergency medical services (EMS), and fire and rescue. We have rural EMS and infection control nurses and physicians. We had law enforcement and universities. We had quite a large representation of stakeholders that needed to

not only have the knowledge, but also would provide the state with input if the task force needed to activate any of our statewide systems.

We have had two meetings of the Ebola Task Force. The first meeting was October 29, 2014, and the second meeting was January 26, 2015. The first task of the Ebola Task Force was to look at some of the requirements that came from the CDC [referred to page 7, (Exhibit C)]. One of the first requirements was to identify tiering of our hospitals. There are three ways a hospital could be tiered: it could be a frontline hospital that has the capacity to care for an Ebola patient for between 12 and 24 hours, or an assessment hospital that must have the capacity to care for a patient up to 96 hours. Much of the care of these Ebola patients requires personal protective equipment (PPE). Many of you may have seen the masks, gloves, and gowns that are required when you care for an Ebola patient. Body fluids are highly infectious, and there is a lot of vomiting and diarrhea associated with this disease. You must have a lot of PPE available. When I talk about a hospital's ability to care for an individual, it is really about having trained staff and also having adequate amounts of PPE to be able to care for Ebola patients. Each and every time you go in and out of the room, you must change, put on, or take off your PPE. The last type of hospital tiering is called treatment. Treatment hospitals must have the capacity to be able to care for a patient with Ebola for the entire term of the illness. In our state, we have both frontline and assessment hospitals. We are not and will not be making this list public, but I want you to know we do have those hospitals. Our neighboring states have identified treatment hospitals, the closest being in Sacramento.

The second thing the task force felt was very important was collecting the local health authority and EMS Ebola plans. It was very important to understand where our baseline was, how prepared our hospitals are, and how prepared our EMS or emergency medical service agencies are for an agent, a type A agent, or something very severe like Ebola. One of the things we did was survey medical facilities' policies and procedures and determine where they acquired their policies and procedures. I am happy to say that all of our facilities had them; however, a very small percentage were specific to all agents and not specific to just Ebola. Of the respondents, 91 percent had policies and procedures and followed the CDC as their primary guide, and 9 percent of those who had policies that followed the CDC guide also had a corporate or an infection control plan. However, 100 percent of our hospital facilities and medical facilities had Ebola response plans. I think it is very important to reiterate that Nevada is prepared for something like Ebola. In addition, it was very important that our regulatory agency, the Bureau of Health Care Quality and Compliance, assured us all as part of the task force that type A agent plans, which is the broad category, exist in all hospitals. The Bureau said that when they survey for

facilities' licensure, these policies are actually looked at. That is, in fact, the case. These types of policies are reviewed by our regulatory agencies to assure that they are in place.

The other important thing to look at for the Ebola Task Force was emergency management training, especially in rural Nevada [referred to page 8, (Exhibit C)]. We have found that our larger facilities in urban Nevada have been doing types of training both specific to Ebola and specific to all the infectious agents that we could encounter here in our state. We found in the survey that of 23 total rural agencies that responded, 70 percent actually had been trained on putting on and taking off the PPE and their process for Ebola, and 30 percent were in need of training. In urban Nevada, the majority of our hospital facilities have had and continue to have training. It is important to note that a rural hospital facility would train to any infectious agent. It is not that we have one type of training for Ebola, one type of training for flu, and one type of training for tuberculosis. It is very important that our hospital staff is trained to infectious agents of all types, and that is what we are seeing across our state.

In our second meeting, we identified that there were some rural communities that required training. We are currently in the process of creating PPE training videos as well as training first responders or emergency medical staff on preparedness for any of these agents. As a result of our first meetings, we are developing trainings for rural Nevada.

Personal protective equipment is important not only for our hospital staff but also for ambulance drivers and emergency responders. When we looked at emergency medical service agencies, we found that 52 percent had the required PPE necessary for Ebola. When we looked at hospitals, we found that 81 percent of them had the recommended equipment for Ebola. There are a couple of nuances to Ebola PPE. One of them is a more complete facemask and longer gloves, as well as taping the gloves. Hospitals that did not have Ebola-specific PPE did have appropriate PPE for the gamut of other infectious agents, and that is one issue. The CDC and a number of other agencies that I will specify are issuing some grants. One of these grants will be providing PPE specific to Ebola for all of our hospitals that are either front line or assessment tiered.

Another observation came up regarding the state's stockpile of PPE. The PPE in our stockpile are leftovers from H1N1, the flu that was here a couple of years ago. We found that the PPE in our stockpile would not be appropriate for Ebola. We want to assure you that our stockpile is not intended for Ebola, but if there were a surge or an incidence where a hospital ran out of available equipment,

we would turn to the Governor and to Chief Smith to address the need immediately for PPE that could be made available.

Assemblywoman Titus:
In our rural community I am the county health officer, and we have a local emergency plan and committee that we meet with. We did a tabletop exercise on Ebola. Our concern has been, and remains, that often in rural Nevada there is one provider. When that provider is not there, there is no other doctor for 30 miles. Our ambulance service is not clear on the fact that if they bring somebody that is suspicious for an infectious disease to our emergency room, then we are done. That community now has no further health care providers available because we all have been potentially exposed. We have not figured out where they go and what our local ambulance can do for that.

My other question is regarding the stockpile of some PPE from the H1N1 crisis. When we pulled it out for this one, all the batteries were dead. We had ten of them, and we cannot afford to get new batteries for this equipment. I am concerned that when grants come out to the rural area, it looks great on paper, but we have automated external defibrillators with batteries that do not get checked. What is the expense and what is the follow up? If you do something like that, please include a plan so there are systems in place to make sure that it is monitored, so the equipment is not outdated and the batteries are not all dead. We cannot afford now to replace the batteries in this equipment that has been donated to us in the past.

Christopher B. Smith, Chief, Division of Emergency Management and Office of Homeland Security, Department of Public Safety:
You are exactly right. When we deploy resources through grant programs, there has to be some type of sustainment plan in place. As we have learned from H1N1 and what is in the state stockpile, that sustainment plan must be addressed by the Ebola Task Force. They must work with local jurisdictions as well as state agencies to see if they can identify a potential funding stream in the future to support those pieces of equipment. We see that across the board in public safety, whether it is radio systems or other types of equipment where there is that long-term sustainment. When we are asked to use those pieces of equipment and the batteries wear out, there is no funding stream to replace them. I totally agree with that, and we will certainly take that into consideration as we move forward with the task force.

Assemblywoman Titus:
We did buy two batteries, so we do have two full pieces of equipment.

Tracey Green:
One of the things that we have identified is alternative transport. Working with your community EMS emergency management team, we will be providing for those ambulances to be dressed where we have available resources. The ambulance also needs to be protected from the client. This is more important for non-Ebola-related issues. For an Ebola victim we know is coming, this is not an issue endemic to our state. Your point is absolutely critical when we look at all of the other infectious agents. Ebola is somewhat predictable in that we are tracking an individual that has been flying. We know that individual is coming. He is not likely to just show up with an Ebola fever. That is the good news. The other news is that we want to assure that your community, as well as all of our rural and frontier communities, is prepared for all other infectious agents.

Assemblyman Hambrick:
You touched on maintaining the transportation aspect. Most of us saw what the ambulances in Atlanta had to do maintain those vehicles. Some communities have only one ambulance. How long might it take to get it back into an adequate degree of service?

Tracey Green:
That is exactly right. We did see that 52 percent of medical services had Ebola-specific equipment. We are looking at what it would take to have a single ambulance transport specifically for our rural communities and identifying those single ambulances that would be responsible for moving once a client arrives. It is important to stress that this is more about infectious disease in our community than it is about Ebola. That is absolutely the direction we are moving in.

The other thing that I think is critical to share is that the hospital association has a Master Mutual Aid Agreement in effect. It is an agreement among all hospitals to share resources. This would be very important should a hospital get an individual that required a lot of PPE, as was described. If they were an assessment hospital and they ran out of PPE within five days, there is an agreement currently in place among hospitals to share PPE and other equipment. It is important that we all know that it is in existence.

Chief Smith will now give an update from the Division of Emergency Management.

Christopher Smith:
It has been an honor to be part of the Ebola Task Force. We were thrust into this from the emergency management world, and all of us became Ebola experts

in a very short amount of time. I am a junior epidemiologist now and learning about that world. The Division has certainly been involved with hospital preparedness over the last several years, allocating funds from the Office of Homeland Security and supporting hospitals in their attempts to upgrade their medical surge plans [referred to page 9, (Exhibit C)]. We were confident going into this event that the hospitals had medical surge plans that were appropriate and ready to activate. However, through the discussions with the Ebola Task Force, many of the members articulated concern about how the incident command system would really work in a public health event. It is not like a wild land fire or crime scene, where you have a specific area that is contained. Public health events can be widespread, and that requires something called area command and the ability to coordinate an effective response, share appropriate resources, and ensure that we accomplish the mission together.

The Division of Public and Behavioral Health articulated to us, the emergency management community, that we needed more practice with incident command. As a takeaway from the Ebola Task Force's work, the Division of Emergency Management is working with the Division of Public and Behavioral Health to develop a senior leadership course that identifies how area command will work with a public health event. We are going to provide for six of these courses statewide: two in the north, two in the south, and two in the urban area to bring together the folks that really need to understand how this plays. It is more than just a training. It is going to be a class and then a tabletop exercise component so we apply some of these skill sets as well.

In the wild land firefighting community, the individuals who engage in incident command are experts, and they practice their expertise on a regular basis. Infectious disease is like a large-scale wild land fire, but we do not get to practice with the public health professionals like we do in wild land fire activity. This affords us this opportunity, despite the fact that it came about because of Ebola, to really focus on infectious disease and to build capabilities of senior leadership in public health across the state to ensure that we have the ability to adequately coordinate and respond effectively.

Tracey Green:
One of the directives that we received was to make some recommendations from the task force to Director Gilliland to go to the Governor [referred to page 10, (Exhibit C)]. I would like to touch on some recommendations that came out of our first meeting and some of the follow-up from the second meeting.

First, there are a number of funding streams that are coming into our state. They are all in the form of grants, and they must be applied for. The first one I would like to talk about is Ebola Supplemental Funds grant. This is a CDC

grant. We have received it, but I do not know if we have received the notice of grant award. It is a noncompetitive grant, which means all states received it. We received $54,212. This grant was specifically for supporting the monitoring programs of our local health authorities. It was distributed, and will be distributed this year, to the urban communities as well as those rural communities that might need to track individuals. In our state it was only in Washoe County and Clark County that we had any monitoring. This grant will be sub-granted to the local health authorities for continuing their monitoring program and to support any of the dollars that they have already spent in monitoring individuals that have already come into our state.

The next grant, the Ebola Preparedness and Response Grant, is larger. This is also a CDC grant, and we will be receiving $1.6 million. This grant is to support state, local, and tribal Ebola public health response efforts. This is very similar to what Chief Smith spoke of. It is to assist us with funding for collaboration, coordination with the emergency management system, partnering with our local jurisdictions and health care, and for assuring that the coordinated system is in place. We will be getting and receiving requests from those entities that are interested in receiving this grant.

We are also expecting a lab grant through the Ebola Epidemiology and Laboratory Grant, although we do not know exactly how much this grant will be [referred to page 11, (Exhibit C)]. It is a competitive grant, which means we are currently in the process of applying for it. Unlike the noncompetitive grants, not everyone is assured of getting something, but we believe that we will have a competitive application. This grant is for enhancing our surveillance and monitoring system, which is very important for infectious control. It is very important for enhancing our laboratory biosafety, biosecurity capacity, for being able to track through airports or people traveling by boat when they come into our state, and it looks at migrant health and border intervention. We believe we will have a competitive grant. We are in the process of that as we speak.

The next grant is the Hospital Preparedness Program Ebola Preparedness and Response Activities grant. It is the grant that will go to hospitals. We do not know how much money this will be or what the grant award will be. Assemblywoman Titus, this grant is intended for health care system support. This is where we would look at how we could support maintaining equipment, your hospital's ability to get PPE, to communicate, and how our ambulance system could get support in travel. It is another noncompetitive grant, which means we will be getting this grant. We just do not know how much, or exactly when.

One of our further recommendations that came out of the Ebola Task Force was to continue the task force [referred to page 12, (Exhibit C)]. When we had our first two meetings, we found the composition of this task force was very important. We are now looking at not only continuing it as the Ebola Task Force, but also continuing it as a statewide emergency response task force. We are looking at surge care plans and how we will deliver care if, for example, we had a number of flu cases and there were too many cases in our hospital. We are looking at how we can sustain the integrity of our task force and look at other issues where this cross section of individuals could speak to some of our future needs in the state. There was also the question, as Chief Smith mentioned, about Incident Command System training and how we can bridge emergency management and public health training so that they are integrated. We are also discussing what we will do, or what we would do, if our capacity was reached in any facility, usually by patients suffering with diseases other than Ebola. Additionally, there is the Nevada Intrastate Mutual Aid System bill, Assembly Bill 90.

Finally, we want to enhance our all-hazard plan to include collaboration with public health, local health authorities, hospitals, and as Chief Smith mentioned, to integrate emergency management, emergency response, hospital care, community care, and public health. Those are the primary recommendations from the Ebola Task Force.

Assemblywoman Titus:
I am encouraged to hear that you are going to continue this and maybe eliminate the title of Ebola. If there is one thing that we have learned, it is that there is going to be something else that comes. You are going to give us a presentation about measles shortly. We still have the tuberculosis outbreak and other issues and potential health care exposures that we cannot even predict. I would encourage you to make sure that we think more globally. We may not have had an Ebola patient yet, but it could happen at any moment. Things can change at any time, so I encourage you to continue under that strategy and to have follow up plans that you implement.

Again, first responder training in the rural areas is critical. We have had incidents in my community. We have farming there. We had workers exposed to some unknown chemical. They presented over 100 people to our emergency room (ER) and immediately shut it down. We have done our own internal changes with very little help from anyone, but we need to make sure that those of us in rural and urban areas look down the road for other infectious diseases. Infectious disease is even scarier in an urban setting. I would encourage you to make sure that we are not getting donations or things from this grant that we cannot afford to sustain.

Assemblyman Thompson:
This is a very comprehensive presentation, which I like. I am sure the community likes that we are being very proactive in our approach. I have a suggestion on the last bullet point about enhancing the statewide all-hazard plan. I am sure this is not an all-inclusive list of all the committee partners, but I want to make sure we include our community-based organizations and faith-based communities, because they are really close to the people. They will not need to know all the specifics on training but at least some signs and symptoms to help with that public education piece.

Assemblyman Trowbridge:
You mentioned in your presentation that you are going to have six tabletop exercises: two in Las Vegas, two in Reno, and two in Winnemucca. Are those computerized classes? The reason I ask is because we have 27 cases in the Las Vegas area, 5 in Reno, and none reported in Winnemucca. It seems as though the distribution of your resources appears to be a bit skewed.

Christopher Smith:
The tabletop exercise and trainings will be in person and not delivered via computer. The exercise is a collaborative exercise including public health officials and responders from a variety of areas. We are planning to offer the courses in geographic areas that would be easier for people to get to. We feel that offering the courses and taking direction from the Division of Public and Behavioral Health, while keeping in mind where the majority of people would be able to travel to, is the main reason why we designated Winnemucca, Reno, and Las Vegas.

Assemblyman Trowbridge:
Is it easy for the people to attend classes? How many health care professionals are there in southern Nevada versus in Winnemucca? How many people are going to be shut out? The sixty spots that are in the class would go very quickly, while in Winnemucca you might have less. I do not know how many would be attending the classes. It does not make a lot of sense on the surface. Additionally, when you consider the increased probability of an Ebola outbreak due to the high incidence of international travelers coming into Las Vegas as compared to Winnemucca, it does not seem equitable. I am not trying to pick on Winnemucca, I am trying to ask where you are spending your money.

Christopher Smith:
I understand your point, and we will take a look at where we are going to be offering the courses. Winnemucca is not a hotbed of Ebola activity, nor do we anticipate it becoming one. However, it is an area where we can pull rural health officials from other rural jurisdictions to easily make that trip to

Winnemucca. It appears to be a one- or two-day course; thus, we wanted to make sure it was in a place we could draw people to. We will certainly take a look at that. Training senior public health officials in Las Vegas is a priority, just as it is in the Reno area. Wherever anybody can attend these trainings, we will make sure they can do so. We have also acquired equipment within the Division of Emergency Management to record much of our trainings now, and we wanted to have that available for those individuals who were not able to attend these classes. We could offer some high points for individuals to learn from.

Tracey Green:
The Ebola Task Force experience has been driven by our local partners, and I want you all to know that this has been a complementary response system. I must acknowledge all of our rural areas, including Carson City Health and Human Services, the Clark County Health Department, and Washoe County Health Department, because they are really doing the work. Though we are here speaking to you, the work has been done by our community health authorities, and they have really stepped up to take care of their communities.

At all of our websites, whether it be Washoe County, Clark County, or Carson City, as well as at <health.nv.gov.>, all of the information surrounding Ebola, CDC measures, PPEs, and policies, is available. I encourage you to use our website for information.

Assemblywoman Titus:
I want to compliment you for what you have done. I heard that the World Health Organization has stated that they too felt they did not respond appropriately to the Ebola outbreak, and that they felt they were underprepared. Of course, they say it all boils down to being underfunded. The reality is we cannot predict where the next emergency is going to be, so we need to be prepared. This alerts us to the next emergency, which we are going to hear about.

Chair Oscarson:
We will move onto our next discussion, which will be very timely. I would like to invite to the table again Dr. Tracey Green, Chief Medical Officer for the state of Nevada. In Las Vegas we have Dr. Joseph Iser, Chief Health Officer for Southern Nevada Health District. We have here Kevin Dick, District Health Officer, Washoe County Health District, and Nicki Aaker, Carson City Health and Human Services Director. We appreciate that you will enlighten us and share with us what you are doing and how we can address some of the concerns that the public has.

Tracey Green:
It is important that we begin with understanding the disease of measles [referred to page 2, (Exhibit D)]. Rubeola is another name for measles. Measles is a viral respiratory illness. It is a virus. Viruses are different than bacteria because our body responds to them but they do not require antibiotics. Treatments for viruses are essentially supportive, meaning we treat the symptoms of the viral illness. A respiratory illness means that it is contagious through mucus and saliva. Things like coughing, sneezing, sharing sodas, or sharing utensils are ways this disease is transferred.

Measles is highly contagious. That means it has the ability to go from one person to another person. It is highly infectious, and that means all you need is a little bit to get exposed. I am going to talk later about the California experience. That is an example where you see that a little bit can expose an individual. In the United States, most individuals are protected. Later, I am going to show you some of the data surrounding our rates of vaccination. When this disease was first introduced to the United States, it was a disease of explorers. As people traveled, they brought the disease from country to country, and state to state. The other thing I want to mention is that you do not get measles twice. Once you get measles, you are immune to measles. The difficult thing about measles is predicting it. You can be infectious when you have no symptoms [referred to page 3, (Exhibit D)].

There are four stages of measles. The first is the incubation period, which usually lasts between ten and fourteen days. That means that you have been exposed to measles, it is in your body and it is reproducing in your body, but you do not have any outward symptoms at all. Then you go through a prodrome period. That usually starts ten to fourteen days after your exposure and lasts two, three, or sometimes four days. This is where you begin to notice the symptoms: fever, tiredness, or a decreased appetite. There is one characteristic finding, which is called Koplik spots. They are little white spots that occur on the mucus membranes around your mouth, and you can also get symptoms such as diarrhea and vomiting. The most common thing during this period is the fever and feeling tired. You know you have something going on, but you are not exactly sure what it is. This is a very difficult time because often this is what you present to your doctor.

The next stage is called the rash period. This usually begins about two to three weeks after exposure, and this is the time when you know you have contracted something. The measles rash is probably one of the most diagnostic rashes for doctors that have seen measles before. It usually starts on your face and moves down through your body. That characteristic presentation is also important for physicians and for physician extenders that are trying to diagnose

what you have. During the period you get the rash, a couple of days after you have your rash, you start to feel better. However, the problem is that you have had a whole period of exposure with these very nonspecific symptoms, and then you go through a recovery period. Very much like other viruses, you can have a cough that can last one, maybe two, or three weeks even after the rash has completely resolved. The infectious period for measles is from about four days before you develop symptoms, until about four days into your rash. This is one of the reasons why it is sometimes very difficult to diagnose measles in the most opportune time because you have not had any symptoms, or your symptoms are very nonspecific, like a runny nose or fever.

Today, measles is a disease of the unvaccinated population. If you were in a generation born before 1956, you might remember that it used to be a trend for moms to bring all the kids from the neighborhood into the home, so that everybody got measles together, around the same time. As we move toward disease to vaccination period, what we have seen is essentially an elimination of the disease except for those unvaccinated.

During the pre-vaccine era, measles was considered one of the usual childhood diseases [referred to page 4, (Exhibit D)]. In developing countries, because of limited access to health care and the limited level of services available, we see up to 5 percent death associated with measles, primarily from pneumonia and encephalitis, which is swelling of the brain. There is a much greater decrease in the death rate in developed countries because we have access to services to treat individuals that, for example, have pneumonia.

In 1963 a vaccine was introduced, and in 1968 there was an improvement in that vaccine. The measles vaccine currently also contains vaccines for two other viruses. The vaccine we currently use is called the measles, mumps, and rubella (MMR) vaccine. Prior to the 1970s, three individual shots were given for those viruses, but now you get one. In 2000, the U.S. declared ongoing measles transmission elimination. That does not mean there were not sporadic cases, it means that the outbreaks were under control by the year 2000. The measles, mumps, and rubella vaccine is the way in which we currently vaccinate for measles [referred to page 5, (Exhibit D)]. It is a two-part vaccine. The vaccine is our best weapon to fight this disease. It is very effective and very efficient. Of the individuals who receive two doses of the MMR vaccine, 99 percent will develop adequate immunity or response to the vaccine so that they get antibodies to measles.

The calendar for vaccination has a requirement by the American Academy of Pediatrics as well as the CDC that children get their first dose of MMR between the ages of 12 and 15 months, and their second dose, or booster dose,

between the ages of 4 and 6 years. Oftentimes we have to do an accelerated vaccination. If we are not sure we are going to be able to get a child to follow up, we can give the second dose 28 days after the first dose. For example, if a three-year-old child were to present to my office and had not had their first dose, they could get their first dose immediately, and as long as it was 28 days later, they could get their second dose.

There was an outbreak in 1990, and 30,000 Americans were infected with measles, so this booster dose was implemented. It was shown that there was a little bit of a reduction in immune response. About 5 percent of people did not respond adequately with antibodies in their body from the first dose.

Almost everybody can get the MMR vaccine, but there are some people who should not and cannot get it. The first group is those who are found to be allergic after the first dose. The second are individuals that are allergic to either gelatin or neomycin, which are present in the vaccine because of the way it is prepared. The third are individuals who are either pregnant or planning on getting pregnant in the next four weeks. It may sound odd, but if in a very short period of time you are going to get pregnant, this is not a vaccination you want to receive. Conversely, we do recommend that everybody who is planning on getting pregnant makes sure that they have an MMR shot, specifically because of the possibilities with the virus rubella. It is important to protect them from that. All of these are appropriate for pregnancy-age individuals, but not if they are planning on getting pregnant in the next four weeks. If you have a weakened immune system, this vaccine is also not recommended. This includes individuals with cancer, HIV, and AIDS, or those individuals that are on chronic steroid treatment. This is a live, attenuated vaccine, and these vaccines are not appropriate for individuals that have immune response issues.

It is important that adults get two doses. If you are going to enroll in college or any higher education, you are required to have your second MMR dose. If you do not know if you have had the MMR shot, we can do blood tests, but we recommend you vaccinate, vaccinate, vaccinate. If you were to get a third dose, it would not be a problem. If you are unsure, remember, we want you to get vaccinated. If you were born before 1956, we assume you are immune because the virus was in existence throughout our nation, and almost everybody was exposed. If you are unsure and entered into the academic system, you are going to get your MMR shot as well.

If you get a vaccination, unlike getting a live virus, you could still get a measles-like syndrome, or I might refer to it as measles-lite. You could possibly get a very mild case of measles, post-adequate vaccination, but it is very, very

rare, and not really what we are seeing in these outbreaks. This is primarily a disease of unvaccinated people. There are very minimal side effects to this vaccine, such as fever, or redness or soreness at the site of the vaccination. About 1 in 5 people might get a low-grade fever, or could get a mild rash. There is some joint pain, interestingly more common in adult women. There can be some bleeding, but it is very rare. There is no current medical evidence to support a connection between MMR vaccination and autism, and it is important that people get valid medical information when making determinations about whether or not to get vaccinated.

This is the current childhood immunization schedule [referred to page 6, (Exhibit D)]. It is quite user-friendly. The yellow bars are the range of time that you can get a vaccination. These charts are available and will be posted on our website. They provide information as to when it is necessary for your children or adolescents to get their vaccinations. This one focuses on people up to age six.

Assemblyman Araujo:
Are measles detectable during the incubation period?

Tracey Green:
During the incubation period, there are some markers that indicate your body could have it. In addition, there is a test called polymerase chain reaction (PCR) test that would be positive when the antigen or virus is in your body.

The rates for children ages 19 to 30 months having at least one immunization dose are fairly good across the nation [referred to page 7, (Exhibit D)]. Based on rates within states, we look at the exemption rules and reasons you can be excluded from having a vaccination. Overall in the United States, 91.9 percent of children had at least their first dose. We identified that in 2013, 90.4 percent of children in Nevada had their first dose. That is less than the national average. We collect data in all kindergartens across our state, and that is where this data came from. This resulted in some more stringent regulatory aspects of how we assess whether measles vaccinations are occurring in our schools.

Between 2013 and 2014 we began looking at not only the first dose but also the second dose [referred to page 8, (Exhibit D)]. In our public schools, 96 percent of students had the second dose and 93 percent in private schools had theirs. We are seeing very high vaccination rates for measles in our schools. We believe much of our success here is because we do have very strict exemption rules. There are essentially three categories for exemption:

medical, religious, and philosophical. In our state, we acknowledge medical and religious exemptions.

We are a mandatory reporting state, which means that any health care provider that gives an immunization is required by regulation to report into our WebIZ [referred to page 9, (Exhibit D)] the name, date of birth, gender, and social security number of the child or adult that they provided the vaccine for. It is statutorily required.

We do have an exemption for religion and a medical exemption, which means you have one of the medical reasons I mentioned. This enforcement is done at the day care and at the school district level. We require at least acknowledgement, and we have minimum requirements that must be provided to the school district because the school district must have a completed, up-to-date vaccination record for your child before they are allowed to be enrolled and attend school at all levels. That is also a statutory requirement. In some of our local areas, there are even more stringent requirements in order to claim or to have a religious exemption.

I would like to speak about what we are calling the reemergence of measles [referred to page 10, (Exhibit D)]. Measles is still predominately a disease of travelers. We still believe that the original person that started the California, Disneyland outbreak was a traveler. We have not been able to identify the source, but we still believe this is being brought into our country by travelers, and the exposure is to those who are unvaccinated. Those that do not get the vaccination because of a medical or religious exemption are covered by what we refer to as herd immunity because of their low percentage. Herd immunity means that if everybody else around you is immune, then you are protected because they are not going to expose you to disease. Most of our exempted children would be protected by herd immunity assuming that the rest of the population that should be vaccinated is in fact vaccinated. One in 12 children in the United States has not received their first MMR shot. Colorado has 86 percent coverage. Colorado is one of those states that has medical, religious, and philosophical exemptions. In the states where we see more exemption opportunity, we see more uncovered children, and that is what this slide is addressing. When we see those high numbers nationally, we look to those states that have more opportunity for exemption.

Last year we had the highest rate of measles cases in the nation since 1994. There were 644 cases of measles. What was most interesting about this outbreak was that half of them were in an Amish community in Ohio, and at least a third of the additional infections were from missionaries that were specifically returning from the Philippines. In an area in which there are

a number of unvaccinated children and also travelers, we were able to label the actual measles virus that this group of children had. When we look at this last year of 644 outbreaks, over 400 of them were related to the Amish community and to missionaries from the Philippines. To date, the United States has reported 105 confirmed measles cases from 14 states [referred to page 11, (Exhibit D)]. Most of these are being associated with the California case, and I will show you more data. The majority of these cases were in individuals we can confirm were not vaccinated or in those that are unsure whether they ever were vaccinated.

Assemblywoman Titus:
Before we proceed, it would be helpful for the general public to understand the outcomes of those 600 exposures because there is a huge concern about risk, complications, and how serious this disease is. Do you have any data on the 600 cases from last year? Were there any serious illnesses? Did anybody die? Those types of figures may alleviate some fear.

Tracey Green:
I do not have specific data for the 644 cases, but I would be happy to get that. I do know that 1 in 500 had a serious occurrence. That is the data that is existing for measles that is in an outbreak, but I cannot speak to those 644. Twenty-five percent of unvaccinated people who get measles will get sick with measles and require hospitalization, but about 1 in 500 may die because they get more serious complications. Many of them, given our current ability to treat pneumonia and encephalitis, get a serious complication but do not die.

This is the most current map [referred to page 12, (Exhibit D)] of the 105 cases of measles across the nation. You can see the affected areas surrounding Disneyland on the West Coast.

I am going to talk about the virus itself. We have a unique opportunity in virology to mark a specific virus so we can identify it by the label of the virus. If a virus had "A,B,C,D" on it and another virus of measles type might be an "A,B,B,B", we can know whether a virus was related to the virus that was spreading in Disneyland. We can actually mark the genetics of the virus, and that is how we know the relationship of the virus to those California cases. Nevada is surrounded by a number of states that have the additional philosophical exemption. I want to draw your attention to the fact that we have not identified any direct relationship to the California cases. The current and surrounding cases that we have been able to identify are in states that have less restrictive exemption requirements. California officials think that almost all, if not all of their cases are related to this Disneyland case. As of February 9, the CDC is now going to require us to report our measles incidences by state.

In Nevada, we currently have 14 cases of measles that were reported to the CDC between 2000 and 2014 [referred to page 13, (Exhibit D)]. Almost all of these cases were travelers, which is important to keep in mind. In 2015, to date there are two cases confirmed in southern Nevada, and I am sure Dr. Iser will be speaking to those. We have two probable, five suspect, and two ruled out.

I need to spend a little time talking about how we test for measles because it is very important when we try to understand. I am going to give a brief immunology overview. When a virus enters the body, it delivers something called an antigen. The antigen, which we will refer to as the measles antigen, causes the body to develop an immune response, and the body makes antibodies. The antibodies are what protect us from getting measles over again. Your antibodies develop when you get a vaccination. In order to test for measles, we can test for the antigen, which is the virus itself, or we can test for the antibody. The antigen test is called the PCR test. If that test says positive, you have measles in you. A negative result means that you do not have measles. The only problem with the antigen test is that you have to have enough antigen in you to get a positive, so please keep that in mind. Immunology can get complicated, but I am going to do my best to explain it. Our state lab, as of today, is able to run the PCR antigen test which will tell you whether or not you have the virus in you now; antigen is virus.

The problem with measuring antibodies is that if you have ever had measles or if you are vaccinated, you are going to have antibodies. This makes measuring antibodies more complicated. There is a very early antibody that the body makes called immunoglobulin M (IgM). Later on, the body makes immunoglobulin G (IgG). Consequently, when we are measuring antibodies, we have to measure IgM, which would tell us whether you have an acute infection, or IgG, which says you perhaps had an infection a long time ago, or you have had the vaccine. IgMs come up quickly and go away rapidly so we like the PCR tests because it is either positive or negative. Thus that is the test we prefer. We do PCR by either a nasal swab or a mucus swab. It can also be done by urine, but we are not going to do urine. The other tests are by blood.

Assemblywoman Titus:
That may answer one of the questions about why we cannot diagnose measles right away when a patient walks into the ER, because there is a delay in diagnosis. We put them in a disease set by symptoms and by our exam, so we may have a presumptive but not a true positive, unlike the rapid flu test that can be done quickly in the ER that Dr. Green is talking about. I will see a patient and do a nasal swab, and I can tell a patient in five minutes whether or not they have the flu. It may not be 100 percent accurate, but at least I have a good

idea. So far, that is not out in the general market for the measles vaccine, which is why there is a delay in diagnosis.

Tracey Green:
The PCR test for the antigen takes approximately three days to get a result. When I spoke of the pathology of the disease I mentioned that you may have a runny nose, a fever, or maybe a couple of spots on your face. As physicians and clinicians, we know there is quite a gamut of things that can give you a rash, fever, or runny nose. It is a disease of exclusion in that we try to exclude all the much more common diseases prior to going directly to testing for measles.

We have great representation, and much of what we are seeing is done by our local health authorities, our local communities and our local doctors [referred to pages 14 and 15, (Exhibit D)]. At the end of the presentation, I am going to turn it over to our health officers because they have done an excellent job in technical bulletins and in community education. I have given you some examples of trying to educate communities at both the state and local level. Vaccination and education is key [referred to page 16, (Exhibit D)]. We do have high vaccine rates, but because of travelers and unvaccinated children, we have had some sporadic cases of measles. I continue to enforce that this is not about measles outbreak; these are sporadic cases of measles. It is very important to keep that in mind, and that is primarily because of our high rates of vaccination.

If you are identified as a probable or possible measles case, we do ask for immediate quarantine or isolation. Most of these cases are children or parents who know that they have not been vaccinated, so we try to identify them, quarantine them or isolate them. Then we try to see if there is anyone they have come in contact with that could have been another positive. We try to do those tracings, and the local health authorities will speak more to that.

A big part of what we talk about in education is referred to as "cocooning". We want to create that herd immunity, which means we want to try to vaccinate all that are eligible for vaccination around those fragile children or children with exemptions that cannot be vaccinated.

The regulatory role at the Division of Public and Behavioral Health [referred to page 17, (Exhibit D)] is key, and I know there will be other questions. Much enforcement is done at the school level. It is a requirement through *Nevada Revised Statutes* (NRS) and *Nevada Administrative Code* (NAC) that schools receive and review vaccination records of children. Children must be up to date, based on their age and the Advisory Committee on Immunization

Practices guidance for vaccination scheduling, in order for them to enter school and be in their seats when school starts. Additionally, providers and anybody that gives a vaccination is required by regulation to put the information regarding the vaccine that was given into the WebIZ registry. They must enter when it was given, to whom it was given, and how it was given. Those are regulatory requirements as well as statutory. Childcare facilities are inspected, and they are statutorily required to assure that all of the children that are in childcare facilities are up to date on their immunization records. Through the Bureau of Health Care Quality and Compliance, the state inspects and regulates all preschool, day care, or childcare licensed facilities. This is done semiannually. At least annually, we check that they have assured that all of the children in day care facilities have had their vaccinations, not only done, but up to date.

Assemblywoman Benitez-Thompson:
The past few days I have received emails from constituents. I have had subsequent conversations with Immunize Nevada regarding the run on providers and the issue of parents that may have previously decided that they did not want to have their children vaccinated rethinking that decision. I have heard that the demand on providers to receive the vaccinations was very high and they were not able to keep up with it. Can we talk about how we are able to meet this new demand to ensure that those who have rethought their stance on vaccines have a path to vaccination?

Tracey Green:
There are initiatives that are going on locally. That might be one aspect for referring for the local approaches. In each of our local areas, we are looking at opportunity. What has been offered from the state is that if there is a need for points of dispensing or larger clinics addressing the needs for MMR, we are willing and available to do that as well.

Assemblywoman Benitez-Thompson:
A couple of emails I have received have been from concerned parents, and there might be more myth versus fact regarding information about vaccines. One concerned mother had emailed that her child had a bad reaction at birth to the hepatitis B vaccine so she had decided against any future vaccines. Other parents said a child became sick from a vaccine, so they decided not to do it. Would you clarify more for the public that there might be reactions to the vaccines, but that should not negate getting your children complete vaccinations and following up on those boosters?

Tracey Green:
Validity is needed in the research that is supportable. What we see is, as you were saying, what can be described as "urban myth," or the myth based on either information that is not accurate or is not substantiated with true medical data. There has been no medical data to support the relationship between vaccines and autism. The side effects or possible reactions to vaccines are very infrequent, and they are usually mild. There are very few children that have more serious reactions. That is not zero, but it is very few. The more children we have vaccinated, the more likely we are to not see disease in our state and across the nation. It is important that we have good data surrounding the safety and protective nature of vaccines for diseases.

Assemblywoman Spiegel:
I have a two-part question. When you were speaking of the regulatory requirements for providers to report into WebIZ when they are giving immunizations, is that just for children, or does that cover adults as well? Secondly, is that just for physicians in physician offices, or does that include immunizations that are given in places such as supermarkets and drugstores?

Tracey Green:
WebIZ is for both adults and children. The NAC 439.893 covers adults and NAC 439.890 children, and it is for any provider that gives an immunization. For example, a nurse is required to put the information into the registry.

Assemblywoman Titus:
Here is an observation that maybe you can comment on. We can document immunity for those who are concerned about whether or not they are immune. What are the standards in health care for health care providers and workers? I have been contacted by constituents concerned about whether we are going to quarantine people that have been exposed. In our hospital setting, we mandate that everybody have the vaccine before they can work. I know there are some state regulations requiring who has to be vaccinated and documenting vaccination or immunity. When you are done with measles, maybe you could address whooping cough (pertussis) outbreaks and those types of things that we do have as other outbreaks in this local area.

Chair Oscarson:
I think we will do that another day, if that is all right.

Tracey Green:
Hospitals and medical facilities have their own requirements in regard to vaccination status. They are not statutorily mandated. Regarding your questions on immunity, yes, you can do serology to check for that IgG to see if

you are immune to measles. Because of population spread and vaccination rates, the majority of our population is immune to measles.

Assemblyman Trowbridge:
You mentioned the exemptions come in only three categories: medical, religious, and philosophical, but that in Nevada we only recognize medical and religious exemptions. You stated that in some areas it is more restrictive. Were you speaking about out-of-state? When we go to the school districts and they have to have their shots up to date, how does a parent justify one of these exemptions?

Tracey Green:
A parent, by statutory requirement, must present a document to the school that states that they have a religious exemption or present the disease that is the medical reason for exemption. In Clark County, there are some more restrictions, but that is from the statutory requirement. They must present either their religious exemption or they must present what their medical exemption is.

Chair Oscarson:
Heidi Parker, the Executive Director of Immunize Nevada, is in our audience, and I have asked her to come up after Dr. Green's presentation to provide a brief dialogue addressing if people are having difficulty getting these immunizations and if she has some ideas where we could focus them. Immunize Nevada does a tremendous job throughout the year making sure those immunizations are available.

Tracey Green:
From a virology perspective, we predominately do the PCR test as well as the serology for immune globulin. That is primarily the way we tag and identify viruses.

I just received some information regarding measles. As of June 2014, the CDC had 288 confirmed cases. Of those cases, 69 percent were completely unvaccinated, 20 percent had unknown vaccine status, and 10 percent reported they were vaccinated.

I would like to end by saying this is really about community education and information. It is about vaccination, it is about assuring that with adequate vaccination we are able to eliminate these kinds of diseases. We encourage you to ask for and get appropriate medical information to make your decision as to how and where you are going to vaccinate your children.

Heidi S. Parker, Executive Director, Immunize Nevada:
It is well known that there are provider shortages in Nevada. Families struggle with knowing where to go and knowing how to access the insurance or health coverage they may have. Under the Affordable Care Act, new families are covered, and they may not know now that vaccines are a preventive health benefit. Immunize Nevada does have a measles-focused webpage now; it is <Immunizenevada.org/measles>. We have information at the top of that page about where to go if you do not know or do not have a provider. We also have frequently asked questions that we have been getting through the community. This week I did a live chat on the *Reno Gazette Journal's* website, and all those FAQs were posted there as well.

As Dr. Green mentioned, there are many opportunities to get vaccinated. Our health districts are here today. They are a great resource for that, as are our community health centers and our rural community health nursing opportunities. Parents need to know that throughout the year, not just because of measles concerns, there are opportunities. If they are uninsured or if they meet other qualifications, they do qualify for the Vaccines For Children program (VFC), which is a no-cost program.

Assemblywoman Benitez-Thompson:
There was a newspaper article this week about how more affluent schools who have a population and tend to be higher income earners, also tend to have lower rates of vaccinations, and there might be the myth that many of these vaccination clinics only serve low-income people. However, many families and parents, especially those that are unable to get in to see their pediatrician, can present, get vaccinated, and submit their insurance to the clinics to get reimbursed. Is that a means by which parents seeking vaccinations who cannot get in to see their pediatrician could show up at one of the clinics?

Heidi Parker:
Through support from the CDC, one of the benefits that has happened over the past couple of years in Nevada is billing for private health plans in public health facilities. As a result, all of our health districts are either currently billing or are in the process, and Immunize Nevada has been fortunate to become a safety net under that program. We do have a number of health contracts for community-based clinics. We are not an immunizer, but we work with our providers, and we bill on their behalf. Now at any community clinic that we are able to support, we collect that insurance information and bill. Providers here in the room today know that those reimbursement rates are not usually that great. But we did have income last year, and we were able to put that income back into the program to support it in 2015.

Tracey Green:
The state supports the VFC program. It is an entitlement program so that all children who are not covered by an insurance program are eligible to receive vaccines under the VFC program. That program provides vaccines to community providers and to clinics. Thus, we have the opportunity to provide vaccines to all children.

Heidi Parker:
Something that parents do not realize is that our pharmacy partners do not just stock flu vaccine. Many partners have a wide variety of vaccines available. They usually do not vaccinate younger children, but they do typically vaccinate children age seven and higher and adults as well. They take multiple health plans. Many of the corporate pharmacies, like Walgreens and CVS, have those national plans, and they are a great opportunity. If you cannot get in to a provider, you are not sure where to go, or you do have that coverage, they are another viable option in most communities.

Joseph P. Iser, Chief Health Officer, Southern Nevada Health District:
I am old enough to have had all of those childhood diseases. I remember when one of us got sick, my mother put us all into the same bed for a couple of days to make sure that we all had the same illness relatively close to each other. I remember having those diseases, and that is far worse than having a small pinprick with maybe a day with a little bit of a fever and a little bit of pain at the site. Having these diseases is far worse than having an immunization, and that is from personal experience.

On January 15, 2015, the Southern Nevada Health District was notified of a possible case of measles in a high school student. This is the first case of measles in Clark County since 2011. The student was fully immunized in accordance with CDC recommendations in Nevada law. The case was confirmed as measles by laboratory testing on January 21. On January 22, we and the school district sent a joint letter to parents at the school to notify them of a possible exposure and to exclude unimmunized and under immunized students for three weeks after the last exposure. We also sent out notices to educate our parents about what symptoms to look for should their children become ill with measles, and no additional cases of measles have been identified among school students yet.

We did have a second, unrelated case of measles in an unimmunized adult that was identified on January 29, and that has also been confirmed. Other patients may have been exposed to measles at an urgent care in a hospital where this particular patient sought care prior to a final diagnosis. The health district is in the process of individually contacting each potentially exposed person from

these other settings, to notify them of the exposure, and to determine if they are ill. Using our own Health Alert Network, we have distributed public health alerts to area clinicians, and we are in the process of developing an update for distribution, which I approved today.

We have received and investigated a dozen additional reports of rash illness reported by clinicians. Some have been found not positive by laboratory testing for measles, others are still pending. At this point, we have about six cases that we are waiting for laboratory confirmation. We think the widespread publicity of the outbreak at Disneyland has resulted in an increase of reports from clinicians. I need to change this part of my testimony: even though one of the two cases is not associated with that outbreak, we believe that the young man that I mentioned is more likely to be involved with that outbreak.

We have been working with the Division of Public and Behavioral Health, the Southern Nevada Public Health Laboratory, and the Minnesota Public Health Laboratory to investigate these reports and collect and test specimens. It takes several days to get those back, so some of those results are pending right now.

May I refer Assemblywoman Titus to the second page of the presentation [page 2, (Exhibit E)]? I was unsure if we would refer to pertussis today, but there is a report on pertussis that she and the rest of you can read. We have plenty of vaccine in our clinic, and we do provide immunizations throughout the valley and we are happy to see people. We have not seen a rush on MMR vaccine in our clinics.

Assemblywoman Titus:
Once you get the vaccination, how long does it take before you are immune?

Joseph Iser:
Generally it takes a short period of time. We have been asking people in southern Nevada to get the vaccine, and once they do that, we will allow them to go back to school. We do not think there has been any propagation, but we just want to be safe.

Kevin Dick, District Health Officer, Washoe County Health District:
I want to recognize the hardworking staff at the Washoe County Health District. We have been working on measles before we had our first probable case that was reported. Our staff were working over the weekend, and now this week have been working almost around the clock, between late nights and 4 a.m. beginning with media calls for updates.

Last week on January 26 and 28, we put out a couple of physician alerts on measles. Yesterday we put out another one on laboratory testing for measles, and we have a Frequently Asked Questions bulletin for measles that we are trying to get this afternoon for the physician community. This past Saturday, our team was contacted regarding the probable case in Churchill County. We handed that off to the Nevada Division of Public and Behavioral Health, and they have been pursuing that since then. On Monday, we received word of two possible measles cases: one that was diagnosed by an urgent care facility last Friday, January 30, and one that presented with symptoms and was diagnosed as a probable over the weekend. We heard about that one through a notification that the family provided to the school. On Monday, we obtained and reviewed medical records, interviewed families, and began active monitoring and identifying possible suspect cases, to follow up with them. We coordinated with the Washoe County School District. They worked with us to identify unvaccinated or immunocompromised students for exclusion from schools. We coordinated with them as they issued a ConnectEd advisory to parents of the schools, and following that we released a media advisory on Monday evening. We also participated with the schools. Our staff called parents to notify them of exclusion of the children. We currently have 11 children excluded from the Spanish Springs Elementary School in Washoe County. We also coordinated with the factory where the individual who was the second possible case was a worker. We provided information through that employer to their employees. We activated our outreach response team, and we have been providing guidance and recommendations to numerous questions from school personnel, providing recommendations for staff exclusions, and attending the Washoe County School District crisis action team meetings.

There was a question about immunizations. We have expanded our staffing at the health district to be able to provide more immunizations. About 95 to 100 percent of the calls we are receiving are in regard to measles. Our traffic is way up, and we have additional vaccine ordered. The immunization staff has communicated that nationally, there is no shortage of measles vaccine, so we have vaccine now and we have more coming. I am not aware of any shortage in the community in that regard. We are providing referrals to pharmacies for people who are seeking vaccination after hours. Usually, people seven years and older can receive an MMR vaccine from any pharmacies in our community.

We have coordinated with some facilities to help them in providing the vaccine within their facilities. We have been participating in the California Department of Public Health official calls to stay up to date with developments there and some CDC calls, primarily for getting information out to the media, to keep them informed. We are vetting daily live listings to the state division so they can coordinate with the CDC and provide that information on cases we are

investigating. We have been working with the affected factory in our community to maximize our public health benefit in working with them to protect their workers while minimizing disruptions to their business. We have been the lead entity in communications and outreach in our community. We have had about 25 media contacts this week, and as of this morning, over a thousand local stories about measles have gone out through the broadcast media. I believe we have saturation in the media coverage.

We have conducted all this activity, and maxed out our manpower efforts on this as well as planning for our Ebola response activities last year. We continue to be engaged. The school district has also devoted significant resources in their response and their work with us on this. This is all in the period of time since what broke in our community on Monday. We do not have lab results back to even confirm that we actually have a measles case.

Assemblyman Sprinkle:
I am 100 percent in favor of the vaccination. For those few people that choose not to vaccinate, are there other things going on to try to educate the public on how they can try to prevent contracting this disease, such as hand washing and simple things like that? What types of public service announcements are going on regarding that?

Tracey Green:
Through our immunization program, we have a number of safety measures surrounding hand washing safety when you are sick and staying at home from work. Many of those things can be found on our website at <health.nv.gov>. In addition, we support our local communities and the efforts that they have. Education is critical, and I believe it should start at the state and then spread to all of our communities. There is a lot of education going on.

Kevin Dick:
We are also putting those types of communications on our website, and I believe <immunizenevada.org> has it on their website also. However, since measles is an airborne disease, there are limitations to the effectiveness of hand washing and those approaches. If somebody is not vaccinated and is in an environment where somebody with measles has been, the virus is infectious up to two hours after that person has left the room. If somebody that is not vaccinated walks into that room, they can still contract measles from that exposure. Those types of preventative approaches are no substitute for the protection that is provided by the vaccination.

Joseph Iser:
Mr. Dick is right, this is not Ebola. It is far more infectious than that. Ebola is not an airborne virus. On the average, one person with Ebola may transmit it to two other people. On average, someone with the measles can transmit it to 22 people. It is very infectious, and the virus lingers in the air up to two hours after a cough or a sneeze. Where we have tried to intervene is at the doctor's office, urgent care centers, and emergency departments, so that if there is a suspicion by the parent, we want them to stop before they get to their doctor's office and call the doctor's office to tell them that their child, or someone in their family, may have the measles. The doctor's office can prepare, and we want the doctor's office, urgent care center, or emergency department to have masks there and to isolate the child very quickly as he or she enters the office.

Tracey Green:
The commonness of this virus is that it is not common, and it is important that we appropriately protect ourselves and understand that not everybody with a runny nose or a fever or even a rash has measles. It is very important that we create appropriate caution and that we assure that our Nevadans are getting vaccinated to protect ourselves and each other. I agree with Dr. Iser and Mr. Dick, 100 percent.

Assemblyman Araujo:
My question is for the local districts. We know we have vaccines available, and that is not an issue at the moment. I know that we have promoted it via your websites. What about the diverse communities who do not have access to the Internet or may not have cable? Are we doing more on-the-ground outreach to make sure we are being proactive in promoting the access to the MMR vaccinations?

Kevin Dick:
We do not have a good on-the-ground communication network going now other than through the physician alerts that we put out through our community health partners and Immunize Nevada. We are present in schools, and we do immunizations through the Boys and Girls Clubs of America in conjunction with Immunize Nevada. However, to date with our mobilization, we do not have something that is on the ground providing that from the health district directly.

Joseph Iser:
We do work with our community health centers, which have some of that on-the-ground type of issue that you refer to. We have had lots of interviews on radio, TV, and in print media. We try to get the message out to our local population in any way that we can. We also have numerous clinics where we

provide those immunizations ourselves, from Mesquite in the north, to east Las Vegas, to our main center, or to Henderson. Wherever we provide immunizations, we try to do those.

I feel hamstrung at times. I wish I had a mobile van as I have had in one of the other counties where we provided immunizations. It was actually next door to Mr. Dick, in Nevada County, which is a very rural county. We used that van every week to go out to the more rural areas. Here I would use it in urban areas as well as rural areas, but I just do not have that resource yet. We could take vaccines out to a variety of community centers and work with a variety of clubs to do more.

Tracey Green:
We are working with our local coalitions, and through the coalitions we are able to have community health workers and other workers that are on the ground. This is especially critical in rural Nevada but it is throughout Nevada. We have northern and southern coalitions that are spreading the message on the ground. Enhancing that is critical as we move forward with not just measles, but pertussis, diabetes self-management, and the whole gamut. Coalitions have been an excellent means for us on the ground.

Assemblywoman Benitez-Thompson:
As a mom with two children, one who is not completely vaccinated because she is only 20 months and one who is not yet vaccinated because he is 10 months old, it is unnerving to hear things like, "The disease hangs in the air for up to two hours." For those that are medically fragile and for the babies in the community, what is the best practice for how we proceed over these next couple weeks or when we have this issue in our community?

Tracey Green:
It is important to understand that though there are many diseases in our community, this particular disease is not of high frequency. It is very low frequency, and I would recommend usual behavior where we protect our children and our families. If you are sick, you stay home, wash your hands, take care for all the medical issues that can occur, and not unduly worry about some isolated cases. As parents, grandparents, and family, we need to keep this in perspective. We need to be cautious, and we need to understand if it is affecting our community directly, and if we have been notified, there are some additional precautions that need to be taken. Otherwise we recommend standard precautions for any infectious disease, especially during the winter when we see many more viruses in our communities.

Kevin Dick:
I agree with Dr. Green. This is why we are aggressive in investigating these cases when we first become aware of a possible or probable case in our community, because it is very important to contain that potential of initial disease so that it does not spread. Dr. Green talked about herd immunity. That is why it is so important to keep our vaccination rates up, so if we do have a case, it does not spread through other people in a way that it could come near your child. That is why vaccinations are so important in our community.

As far as being able to respond and contain any spread of disease right at the beginning, in a case like measles in our community, it is not only having the immunizations for our children and being able to get that information through WebIZ, but as adults understanding what our immunization status is. I would encourage employers to work with their employees to ascertain whether they have been vaccinated or if they have immunity from having measles as a child so that they know what the status of the workforce is.

WebIZ may be good for getting information about children that were immunized in the state of Nevada, but if we have adults in the community, particularly if they came from other states, there may be no data for them within that system. In the case of a workplace where somebody potentially has a case of measles, it would be important for that employer and for those employees in the workplace to know whether they had that protection of vaccination.

Joseph Iser:
No medication, no vaccine is 100 percent effective, but this one is pretty darn good as Dr. Green pointed out in her presentation. After one dose, approximately 93 to 95 percent of children or adults are fully immune to the measles virus. Dr. Green pointed out that after two doses, which can be as close together as 28 days, 99 percent are immune. I would like to reassure you and any other mothers out there who have young children that if you have had one dose of the measles vaccine, that is pretty good protection. It is not 100 percent, but it is pretty good. After the second injection, you get pretty close to 100 percent protection.

Assemblyman Hambrick:
My question is for Dr. Iser. I think there is a unique situation in southern Nevada with the hundreds of thousands of visitors we get internationally. Since visitors may come from undeveloped countries and the Pacific Rim where the immunization records are not terrific, what particular challenges do you think southern Nevada faces? Northern Nevada faces it, but the south, Clark County in particular, faces it more because of the number of visitors that come into our community. Could you comment on the situation?

Joseph Iser:
We have approximately 2 million permanent residents down here, and by the latest count, upwards of 41 million visitors each year. They travel both internationally as well as from surrounding states and across the country. Consequently, we do face particular challenges, and those are in all the areas of infectious diseases from foodborne illnesses, which we have seen from our history down here, to any of a number of diseases.

When I did 75 to 100 interviews on Ebola, I kept referring the media to the fact that there are far more things that scare me than Ebola for southern Nevada or for Nevada or for the United States as a whole. There are diseases out there that I worry about more: severe acute respiratory syndrome (SARS), which we have seen in the United States; the avian influenza, which we have seen intermittently in southeast Asia. It would scare me greatly. We routinely get cases of tuberculosis from around the world, and we get in cases of multidrug and extreme drug-resistant tuberculosis. That really scares me a bit more than the others.

We had not found a nexus to the measles cases in southern California and Disneyland until this adult, but there has to be a case that we have not been able to find, that our doctors have not been able to identify, that has brought measles to us. We have not found that case, as often you cannot. We call that the index case. Hence, we will always have these challenges coming in, but in my opinion, some of these other diseases are worse than measles, although measles is a very serious disease. Very few young doctors, and by young, I mean in their 40s or younger, have seen any measles at all in this country. Because it is so rare, it is more difficult to diagnose. Whether I am fortunate or not, I have been able to see measles cases in my career and to diagnose them when I worked with the U.S. Public Health Service along the border. It does not take much to gain that experience, but unless you have a case or two that you can actually see with your own eyes and examine with your own hands, it is a difficult diagnosis to make.

Nicki Aaker, Director, Carson City Health and Human Services:
I want to provide an overview of what is happening at Carson City Health and Human Services and what we are doing in light of this. As of yesterday, we did have two adult suspected cases, and we are waiting for laboratory confirmation. These both presented to health care providers, one in Carson City and one in Douglas County. We have reached out to the schools in both Carson City and Douglas County. It is preliminary results—the schools are reporting to us that it is under 2 percent unvaccinated rate—but they are still looking at records.

We have convened a group at Health and Human Services. We are determining exactly who we are reaching out to and how we are reaching out. We have had health care providers reaching out to us, and we will be responding to them with more information and offering to go and vaccinate their employees if they need us to. If they do not have the vaccination, they can send employees to us. We have an adequate supply of vaccinations at the health department that is on Long Street in Carson City. We also have a clinic in Douglas County where we give immunizations, and once a week we go to Storey County and will be giving immunizations there.

We bill insurances at the clinics for anybody with insurance. We also offer the VFC program, so if a child does not have insurance or is under insured, we can provide immunization. We have extensive experience immunizing in the schools and in community venues, and we are reaching out to some of the employers in the community to ascertain if they want us to provide immunizations at their facilities. Yesterday we began seeing an increase in MMR vaccinations, and we are getting more vaccine in to cover any increase we will see in the future. As Dr. Green mentioned, we do have relationships with a lot of different coalitions within the communities, and we have reached out to them. They are aware that they can reach out to us as well.

Chair Oscarson:
We have some public comment from Las Vegas.

April Tatro-Medlin, Private Citizen, Las Vegas, Nevada:
I would ask that the Committee members think about the past and all the years gone by, and the hundreds of thousands of children that have come here from Mexico with their parents, through the mountains, sometimes through the desert, and there has been no measles outbreak. The number of children that will be harmed or potentially die from the MMR vaccine will probably be far higher than the number of cases of measles. The United States is the most vaccinated country in the world, and we also have the highest level of autism and the highest levels of chronic disease in children in the world. I would ask that the Committee members review information found at the National Vaccine Information Center (NVIC) before making any and all decisions regarding vaccinations. All the information found there has source material. Most of it is government documents, and you will not find any anonymous documents or people who do not want to be disclosed.

Further, I would like to be able to space my child's vaccinations out. As it is now, sometimes children get 5 or 6 shots in one day, and if they are harmed from that, there is no way to determine which vaccine it was that harmed them. An alternative schedule, where those vaccinations were spaced out, would

probably be beneficial to some families who are not necessarily anti-vaccine, but cautious, and want to ensure that their children are not harmed.

Chair Oscarson:
I could not be prouder of what I have heard today. I have heard about the preparedness for what we are doing, the thought process, that we are moving forward, and that we are utilizing these experiences for other potential issues or disease processes that may happen. I am grateful for the dedication of the people who are here today and those out in the field who are doing immunizations and taking care of the people through community resources that are available. Thank you for your wisdom and foresight, and continue to do what you do and protect those of us in the state of Nevada.

Any public comment in Carson City? [There was none.] Any additional member comments? [There were none.] This meeting is adjourned [at 3:47 p.m.].

RESPECTFULLY SUBMITTED:

_____
Nancy Weyhe
Committee Secretary

APPROVED BY:

_____
Assemblyman James Oscarson, Chair

DATE: _____

EXHIBITS

Committee Name: Committee on Health and Human Services

Date: February 6, 2015 **Time of Meeting: 1:32 p.m.**

Bill	Exhibit	Witness / Agency	Description
	A		Agenda
	B		Attendance Roster
	C	Tracey D. Green, Chief Medical Officer, Division of Public and Behavioral Health	Ebola Presentation
	D	Tracey D. Green, Chief Medical Officer, Division of Public and Behavioral Health	Measles Presentation
	E	Joseph P. Iser, Chief Health Officer, Southern Nevada Health District	Testimony