

Ukulele Music

Keith: Welcome to the LeeCoSchools Edcast #28 with Dr. Karen Landers. August is National Immunization Awareness Month, so we spoke with Dr. Landers because she is the Assistant State Health Officer for the Alabama Department of Public Health and she is generally the person quoted in any news story about communicable diseases in Alabama. She tells us about her fascinating career journey, why vaccines are one of the greatest scientific discoveries of all time, and dispels many myths about vaccines. So, after listening to this, if you have any questions, comments, complaints, criticisms, compliments, colloquialisms, conundrums, or concerns, you can find us on the web at www.lee.k12.al.us/EdCast, on Twitter and Instagram @LeeCoSchools, on Facebook at facebook.com/leecoschools, and we have our own icon on the Lee County App which you can find in Google Play or whatever Apple has now. Finally, you can email us at edcast@lee.k12.al.us I want to give a shoutout to my former co-host and consistent producer, Mr. Kyle Christian. Thanks as always, bud, for making me sound smarter than I am. Without further ado....Allons-y!

Funky Transition Music

Keith: to begin let's just talk a little bit about yourself let's get you to introduce yourself how did you get to be at the Department of Public Health and just you know give us a little bit of your CV

Dr. Landers: okay i'm dr. karen landers with the Alabama Department of Public Health my specialty is pediatrics I am a career public health physician I completed my residency training at the University of Tennessee after graduating from medical school from the University of Alabama School of Medicine in 1977 completed my residency in 1980 practice pediatrics in the private sector for two years and came to the Alabama Department of Public Health in 1982 so again I am a career public health physician with the Alabama Department of Public Health my range of expertise includes not only general pediatrics but I have also worked in tuberculosis control vaccine preventable diseases general infectious diseases and outbreaks have a special interest in tuberculosis control and vaccine preventable diseases I also have an interest in the emergency preparedness for children I am currently the American Academy of Pediatrics representative for the state of Alabama regarding pediatric emergency preparedness last year I deployed to the Marshall Islands with the Centers for Disease Control and the World Health Organization to work on the tb-3 maschera project with specific contributions toward pediatric tuberculosis in that area of the world

Keith: wow that's quite the career of public service you've got

Dr. Landers: well when you've been doing it for 42 years you've had an opportunity to do a lot of things

Keith: it is increasingly rare to find someone who's been as dedicated their lives to public service like you have so that is very impressive and I think we're very lucky to have someone with your sorts and dedication working on behalf of the people of Alabama you mention the Marshall Islands well you were that to help eradicate TB in the Marshall Islands is that what that project was

Dr. Landers: yes actually this was a project of the Centers for Disease Control and also the World Health Organization and other organizations committed to the reduction of tuberculosis in other parts of the world and of course that particular project I worked with a team of physicians nurses epidemiologist and disease intervention specialists actually seeing patients there in the Marshall Islands speaking with those patients reading chest x-rays interpreting laboratory results and either prescribing treatment for tuberculous disease or preventive treatment for TB infection so it was a very large project we actually the final numbers we screened almost 20,000 people in a population of 26,000 people so it was quite an undertaking the effort actually started in June of 2018 and ran through November 2018 basically augmenting what the republics of the Marshall Islands is doing in its Public Health Service really augmenting that with other physicians nurses and health care providers from throughout the United States to support the efforts of this country to again eradicate tuberculosis in their population

Keith: that's fantastic but I think the Marshall Islands in the South Pacific is that right

Dr. Landers: yes it is actually the Marshall Islands is the Republic of the Marshall Islands there are a number of islands grouped together Majuro is of the largest in terms of population there's also an island Ebuey which had a project prior to this one last year on TB eradication I believe the population of those islands is somewhere in the neighborhood of 75 or so thousand so it's not a huge part of the world but it's a very important part of the world and a very important partner with the United States in terms of lots of different activities so again a very gracious group of people to work with and a very committed governmental organization with its Public Health Department

Keith: that sounds really cool so let's just talk about some basics I'm talking to you for our August episode which is National Immunization Awareness Month we're talking to you today for just some information on vaccines immunizations and try and hopefully help dispel some of the myths that have inexplicably cropped up in recent decade or so so just to get started let's talk a little bit about what are vaccines and what exactly is it that they do

Dr. Landers: well of course vaccines are really one of the most important public health advances of the 20th century in fact it would be in the top ten public health advances in the last century markedly reduced disease and improved morbidity and mortality among the population really allowed a lot of people to live who would not have lived had they not had these life-saving vaccines so again for example let's talk about a vaccine that a lot of people are very familiar with and that's the tetanus vaccine if you think about tetanus *Clostridium tetani* not being you they put this in the soil well you know we know that if persons are not vaccinated for tetanus then they are very likely to contract tetanus disease which is very very serious and certainly very likely to be fatal so this made a huge difference even in if you think about World War two made a huge difference in the population where you know persons would be wounded on a battlefield for example and were able to receive tetanus vaccine along with other medical care and obviously reduce the risk of their developing tetanus disease so I think you know that's extremely important but obviously you know post-world war two we're talking about continued advances in vaccine and of course diphtheria vaccine pertussis vaccine or whooping cough vaccine so that now we basically give the tetanus vaccine as you know tetanus diphtheria pertussis vaccine again depending on the formulation and the age of the patient so I think that's an extremely important and life-saving advancement we certainly just don't see diseases such as tetanus or diphtheria any more in the United States as a result of people being vaccinated very very very rare to see that now whooping cough again the whooping cough vaccine it was used for a number of years with actually what was called whole cell and that's WH o le or whole cell vaccine and of course this vaccine while was a very good vaccine was accompanied by some uncomfortable side effects in some children such as fever and in very very very rare instances of children might have a febrile seizure after taking this vaccine but again a very very unusual and very rare condition after that so a vaccine called acellular pertussis was developed and again just an improvement on our ability to fight pertussis as a result of the acellular vaccine so we can just talking about one vaccine product now that we have which is DTaP and younger children or t VAP in person seven years of age and above and one thing that's important about whooping cough is that we're seeing an increase in whooping cough in the United States you know part of that is persons not being vaccinated another part of that is that the acellular vaccine probably does not confer as long an immunity process as the whole-cell pertussis did but also being aware that it's very important for adults to have received an i cellular pertussis vaccine specifically if they're going to be around young children and of course now the recommendation for pregnant women to receive the acellular pertussis vaccine during each pregnancy and again that's given as the the Tdap so I think that's a way for us to combat a disease like whooping cough which is very significant and very severe in infants and children specifically under one year of age so again just one vaccine product that we're talking about here that has had significant effect on the population

Keith: refresh my memory from what I remember is that a vaccine is essentially either introducing a dead form of whatever we're vaccinating against or like with smallpox was cow pox that would help build the immunity if you

had cow pox you had an immunity to smallpox if I'm remembering your history on that correctly is that what we're essentially talking about with the vaccines these days or is it is this something slightly different now

Dr. Landers: well I think a way to explain it for the general public is really categorize vaccines if you will into the inactivated vaccines or what I call the killed vaccines of such as the you know the the vaccines like I was just thinking about the tetanus pertussis diphtheria or again acellular pertussis so we're really talking about an inactivated vaccine and then their other vaccines are what's called live attenuated vaccines and by that I mean there there is a live virus that basically the infectious part of it if you will or the part that actually causes disease has been attenuated or modified so if we talk about you know what I call again inactivated or killed vaccines I like to use that term such as the DTaP or the TD AP and then we can also speak about the some of the they live attenuated vaccines such as the measles mumps rubella vaccine being you know one of those very important vaccines as well as as the varicella vaccine the MMR vaccine or measles mumps rubella is actually given as a combination vaccine there is in the United States no such thing as single dose marked single dose measles and single dose rubella again it's given as a vaccine combination and then of course there is a vaccine where the varicella component can be added in with the MMR again depending on age and indication of the child so that's probably the easiest way to talk about in terms of categories now in terms of the smallpox vaccine which we do not give to persons other than in the event of a bioweapons attack which certainly would hope would never happen we do have that vaccine available through our strategic national stockpile versus CDC we hope we never have to use it but again some improvements on that vaccine but still a vaccine that that could be categorized as we have talked about so a way to induce the body to develop immunity to these diseases without actually having these diseases to occur and the risk of more severe illness or death as a result of the illness as opposed to protecting with the vaccine so people won't become sick and die

Keith: so some people are maybe confused about we're not 100% sure on things and so one question that some people have is will a child's immune system be weaker if they are quote unquote relying on a vaccine

Dr. Landers: absolutely not in fact there is so much data so much scientific data on the response of the immune system to multiple vaccine products and especially in younger children who actually respond exceedingly well to multiple vaccine products and this is why we're able to give more than one vaccine at a time in childhood I mean the earlier the child is able to receive the vaccine and their immune system is primed with that vaccine the better to develop immunity again there are certain ages at which vaccines are given and this is based upon a lot of research and a lot of science so again I've heard many people discuss this about the vaccine and the immune system but again that's that's not scientifically based it's extremely important that we vaccinate as early as that vaccine is recommended in order to receive the best response of the immune system

Keith: that makes perfect sense to me now I know some people they refuse to get the flu vaccine every year because I can the vaccine give someone the disease that it is intended to prevent

Dr. Landers: okay well again the flu vaccine gets a lot of bad press and we have to remember there's not just one type of influenza circulating every year there are multiple influenza viruses as well as reminding that other respiratory viruses that are similar to influenza in terms of signs and symptoms can cause illness but the influenza vaccine that we are giving the inactivated influenza vaccine cannot cause influenza now there is a vaccine that was on the market and has come back on the market and that is the live attenuated nasal influenza vaccine or nasal spray vaccine and this virus while it is live and attenuated does not cause influenza it was off the market for a couple of years due to a decrease in effectiveness of the vaccine as shown in some studies and I think it's important to realize that that just there by looking at the effectiveness of the vaccine it was able to be rapidly determined that that vaccine was not effective during a flu season so he actually was taken off the market and reformulated and has come back on the market for subsequent flu seasons or again the live attenuated nasal spray vaccine now not everyone can take that vaccine and certainly there are certain age groups that can take it in certain medical conditions that cannot take the live attenuated but again to answer your question influenza vaccine does not cause influenza and I think that the influenza vaccine continues to be an extremely important

preventive method for influenza we know that in a very good influenza season to match to the three or four viruses that are actually in the formulation can vary and sometimes we can have an effectiveness rate that's far less than 50% but in good years if we have a vaccine match between 50 and 60 percent well that's great but stop and think about it this way that much protection is better than no protection at all and by having the influenza vaccine widely used we're able to protect people that don't have as strong an immune system for example people with chronic disease people with a you know a problem that allows their immunity to be less active such as immunosuppressive illnesses so we think it's extremely important for everyone who's eligible for the influenza vaccine which we give six months and older and also given pregnant women to get the influenza vaccine early in the fall to protect yourself against influenza viruses

Keith: tell me if I'm wrong this is what I've heard is that a lot of times with the influenza vaccine what where what is happening is that we're trying to that the strains sort of start in China somewhere or in Asia somewhere and sort of work the way around the world and so they're making those vaccines are guessing which strains are gonna make it over here is that just hokum is that anymore anywhere close to the truth

Dr. Landers: what we have to look at what happened in a previous vaccine year we know that influenza circulates year-round in the world and that actually at influenza season in one part of the world is not an influenza season here in the United States which you know we we can to see influenza more from the fall until the late winter however remembering that influenza viruses circulating year round they don't just you know go into hibernation so we do base currently the influenza vaccine that we have on the previous

year's vaccination or excuse me the previous year's viruses in other parts of the world as well as here in the United States and again it's a it is somewhat of a guess but that's the technology that we have at the moment is basing this on previous years experience

in order to try to target the most likely influenza viruses that are circulating

Keith: one more one more flu vaccine question and then I'm gonna move on to some other stuff but something that just always I'm always curious about why don't I get asked if I'm allergic to eggs when I go get my flu vaccine

Dr. Landers: well again they're in extremely rare and it is extremely rare I stress instances where people might have true anaphylactic or true severe allergic reaction to eggs they might not be able to tolerate certain influenza vaccines but the science has really advanced on that so that while a person is asked that question there are some products that people can actually take and then there are other questions that need to be asked to discern whether or not a person's reaction the eggs would be a true anaphylactic reaction or just a food intolerance and for example if people say well I'm allergic to eggs but I can eat eggs then they're not allergic to the flu vaccine that question is but you know I think we have to remember with patients that if if they don't know something and they ask the question then it's a very good question we ask questions regardless of whether they think it might not be a question that is scientifically sound again if they don't ask and we don't answer them then we're really not serving the patient very well

Keith: all right so you know this podcast is the part of the official podcast of Lee County Schools and so I want to talk a little bit about school related stuff so if if I'm a parent and I'm saying okay well of all the other kids in school are immunized well then or if most of the kids in my kids school are immunized does it matter if some of the if a few of the kids skip vaccinations why would it would it be important that all every single one of them be immunized

Dr. Landers: well I think we have to look at that in terms of your own personal health most people don't just go to school and go home and they go to other places they go to you know to the stores or to church or to other events other social gatherings etc so again their exposure to illness is not limited to the school population they travel to other parts of the United States other parts of the world so again we have to look at it as your own health in your own protection of your own health first of all really cannot rely on someone else take if you're ill taking a

medication and just because you know they're all taking the medication that's not going to help you so we have to look at the vaccine in terms of a personal health measure just like we would any treatment or prevention measure so I think that's one thing that's important another thing that is important is that being vaccinated for certain illnesses that for example you can easily transmit from one person to the next measles again being one we would certainly want to ensure that not only were you vaccinated to prevent your developing that disease but what about people around you that had a severe immunosuppressive condition let's say for example a child that had a bone-marrow transplant or some you know illness of that nature or a child that was not old enough to be vaccinated for measles yet let's say for example an infant who was close to a year of age by that time the mother's immunity has really pretty much gone away that's why we give the in the mark one year of age but maybe that child is not quite old enough to have taken the MMR that child is exposed to measles but a child has a 90 plus percent chance of developing the disease so again not only is it incumbent upon us to protect our own health but to protect the health of other people who might be around us you know or get an illness from us because we weren't vaccinated

Keith: there are other people who would say well if a disease has been eliminated or hasn't been seen in my community or the country then why should the kids continue to be immunized

Dr. Landers: well remember that just because the disease has been eliminated in a certain area a certain state doesn't mean that that disease cannot come back and we have the classic example of that in measles measles was largely eliminated from the United States and by that I mean that persons who were living and working in the United States were not contracting measles within the United States any cases were imported from another part of the world and there's still a lot of measles throughout the world so again while that disease was thought to be eliminated we just have to look no further than the weekly statistics that we see on increases were well over a thousand cases of measles now in the United States so that just because something has been eliminated doesn't mean that it cannot come back and you know we're we're a plane right away as one of my esteemed colleagues likes to say from many vaccine preventable diseases and so it's incumbent upon us to protect our own health and protect the health of our children in order to reduce these severe diseases you know I wish it were the case that we continue to have measles eliminated but with this resurgence that we're having now I believe that it's going to continue and we will have some cases in Alabama fortunately we have not because we have a very highly vaccinated state but we must keep those vaccine rates well above in order to prevent more cases in Alabama

Keith: another argument will be you know in today's society more kids if the kid is healthy and active and eating well you know adequate level of Hygiene and sanitation and clear clean water we don't need vaccines how do we combat that

Dr. Landers: how do we respond to that well I think that's where we can in you as physicians as pediatricians family physicians and other health care providers nurses pharmacists health educators I think that's where we have to remind people that even though these diseases have not been seen in a community they're still out there and they can still resurge so it's fortunate that people have better nutrition now and clean water and sanitation it's very fortunate that we have these great advantages in our country but again while those are all very very good that will not prevent these illnesses again if a person is exposed to these illnesses now yeah a lot of people say well you know I had measles and I did fine well I actually had measles and did fine too because I was I was born in an era measles was very very common but let me say that as an older physician myself I remember my brother being hospitalized with measles pneumonia when he was a young child and in the early fifties and I remember that well enough to remember that my mother and father were terrified and it was far from a situation where okay he's going to be fine and he's going to recover he was very very sick fortunately he did recover but as a young child that is one of my memories of measles but having my brother hospitalized and having and remembering my mother being extremely anxious and upset as well as my father that my brother was not doing well so again very fortunate you know very very fortunate that that he survived that very severe illness but it certainly can be that way in any

one so it's better to reduce the risk of having this illness than it is to run the risk of the severe complications and potential mortality from this virus

Keith: well you know what I hear people say you know the flu that's not that big of a deal it's just getting tell people in 1918 that more people were killed by the flu and then we're by the war

Dr. Landers: well and I think another brings it up to a more racist statistic in the early part of the flu season not you not in 2019 but in 2018 the early part of the flu season here in Alabama we sustained a couple of pediatric deaths and in one of those instances very tragically there was no underlying medical condition for that child so mm 2018 was a particularly significant flu illness season for Pediatrics so I think we still have to remember that you know if we look at the statistics and we see the smaller numbers we might be comforted but if that statistic is you that's not comforting at all if that's your loved one you know that's not comforting at all and as a physician myself again have been doing this for many years and I have seen severe complications and even been made aware of death of children from influenza disease children who had no underlying health problem and to me that's always a tragedy when we lose a person who was otherwise healthy and potentially could have been helped by life-saving vaccines

Keith: do vaccines provide better immunity the natural infections and so what what brings me to this question is I'll hear parents of young children and they'll like with one of the kids in their group get small part not smallpox sorry chickenpox they'll want to have what's called I hear these things called chicken pox parties well they bring all the other kids and they'll all catch chickenpox together first of all is that even a good idea and second of all is it a false question to ask about quote-unquote better immunity vaccines or natural infections

Dr. Landers: well and again we have to remember that vaccines vary in the effectiveness or the efficacy if you will depending on the vaccine product so for example the measles mumps rubella vaccine you put that all together now the Measles component is well over 97% effective in inducing immunity if you look at the mumps component of the MMR it may only be 85 to 90% effective in preventing disease it's still pretty good but it's not as effective as the measles component of the vaccine that's just the nature of vaccine so influenza vaccine is another example as I said in a good year we would like to say 50% or so effectiveness still better than having the disease but getting to back to illness versus natural immunity certainly we can say that the vaccine you as effective as natural immunity and by taking the vaccine we avoid the complications that can occur with any of these other diseases for example it's better to be vaccinated against measles than it is to run the risk of measles encephalitis again very rare but it does happen and you know let's talk about chickenpox for a minute you know again I'm old enough to have seen all of these diseases in children with the exception of diphtheria which was largely eradicated in the United States and the middle of the of the previous century but I'm old enough to sing all of these diseases otherwise and chickenpox again a good example while many children have a mild illness with chickenpox there are people that develop chickenpox and develop a disease such sort of like an encephalitis in addition there can be extremely severe skin infections when I was a very young doctor I saw a secondary skin infection in a child who had chickenpox had really devastatingly ill child that wound up having some skin grafts as a result of a severe skin a patient with chickenpox again that's very rare but it does happen but again looking at the chicken pox parties you know what I have seen ironically is you know sometimes when we see a kid with chickenpox and then the brother or sister gets chickenpox they actually have a worst case because of you know the virus passing through that person it seems like there's a little more virulence at least in in my practice of this so it's still better to avoid the disease than it is to develop the disease if we possibly you know can vaccinate against this disease let's do it rather than exposing a child and running the risk of complication

Keith: now correct me if I'm wrong but smallpox other than outside of a laboratory it's otherwise been eradicated from the planet is that correct

Dr. Landers: that is correct in the late 1970s and again anyone who might be interested in the history can look up a physician who's named D A Henderson you know one of the Giants of medicine and one of the physicians that's very closely associated with the

eradication of smallpox in the world so again fortunately not a virus that we would see outside of a laboratory setting or and very unlikely but potential risk of this being used as a bioweapon now I might mention interestingly enough of actually through my career I've been very fortunate to do multiple episodes of training with Fort Detrick Maryland and Aberdeen Proving Ground which are the United States facilities for infectious disease as well as chemical weapons so I've done some training both at Daedric and at Aberdeen with this particular topic with the topic of bioweapons so again something that we do have training here in the United States we have a lot of information through the Centers for Disease Control in Atlanta as well as other facilities such as the national ebola training center which is located in Nebraska but also has training throughout the United States including Emory now had some training again with some of these facilities so again very fortunate that throughout the world this has been eradicated and it was eradicated as a result of vaccine but we need to continue to study this we need to continue to be aware of this and we need to continue to avail ourselves of of training just so that in the unlikely event we would be ready for this but again a very significant example of a virus being essentially eliminated from the planet

Keith: so what is preventing us from being able to eradicate other diseases in a similar fashion

Dr. Landers: well part of it is part I visit the virus and then we also have to remember that you know we're also talking about some of these conditions or you know bacterial illnesses you know for example the tetanus is a bacteria and again you know the best we're going to be able to do because the this Clostridium tech not can be ubiquitous in the soil is to keep people vaccinated against that the same thing with the diphtheria and you know this is a bacteria so again we have the best we can do is to to vaccinate against this bacteria you know what will largely eradicate these illnesses that we are currently dealing with it's continued high rates of vaccination throughout our country as well as other parts of the world again do not have the resources that we have in the United States and that's why you know some parts of the world don't and so that's why we need to continue our global efforts to reduce vaccine preventable diseases

Keith: let's talk about this "anti-vaxx" movement how did that arise and why is that so hard to combat all of a sudden

Dr. Landers: well as a pediatrician myself and again having graduated from medical school in 1977 I have seen the history of this evolved when I was a young physician you know we provided education about vaccine just like we do today you know I spoke to my patients then just like I do now I explained to them the benefits of vaccine as opposed to the risk of these diseases and the very very small risk that vaccine products pose to people who take them again an exceedingly small risk and much safer than the disease so you know I had this education and information for my patients when I started out practicing and now all these years later what I have things happen is largely with I think more of the social media approach I mean granted social media has not been around for 42 years but it certainly has exploded over the last well let's say 10 15 years but also in the latter part of the 20th century there were some really really fraudulent for lack of a better word studies put out one of them being by a physician from England dr. Andrew Wakefield that falsely and I stress falsely associated the measles vaccine with autism and this just really caught on and even though that study has been debunked that study was retracted by The Lancet that the Institute of Medicine has done a significant amount of research to combat the false information in that study this information still continues to be put forth as factual and and it is not the measles vaccine does not cause autism Associations such as Autism Speaks actually encourages parents to ensure that their children are up-to-date on their vaccines so I think a very false narrative about vaccines and a reliance on non vetted information non-scientific information to really mislead the public you know parents care about their children parents want what's best for their children and certainly I'm a pediatrician I like children I want children to do well but what I think has happened is again people receiving information that it is not correct is just simply not correct and we should rely upon our health care providers our persons that have studied this you know our pediatricians our family physicians our know our pharmacists know people that have done this kind of work have studied this and have looked at the data to ensure what's best for our children as well as for adult so I think this

movement has just caught on and as a result of it we are seeing parents that refuse to vaccinate their children we're also seeing parents that are hesitant to vaccinate and it's incumbent upon us as healthcare providers to continue to provide factual information to ensure that people have the best information to make decisions for the health and well-being of their children as well as themselves

Keith: how frustrating is it though that one study based on junk science will not die but all of these other studies that are based on good science will just be ignored because there's that one junk science paper out there that people latch on to just how frustrating is that as a person who is trying to fight these diseases and you get this kind of thing thrown in your face as a proof of you know why you're wrong how frustrating is that

Dr. Landers: well for me as a physician I think I have learned that if I become frustrated with something that it's a distraction to my being able to objectively present information to patients so I think that's something that one learns through years of practice and learns through experience but I have chosen to take the approach with my patients and with people who speak with me about this subject I want to respectfully listen to what they have to say and then I want to respectfully provide the information that my training and my background and my peers and people that that I respect greatly such as the Advisory Committee on Immunization Practices the American Academy of Pediatrics the American Academy of Family Physicians the information from the Centers for Disease Control as I said through ACIP I want to respectfully present people with the science behind this topic because if I become frustrated if I become personally involved or even personally offended by something it distracts me from my mission and my mission is to ensure the best health care for children and adults and my mission is to ensure that appropriate scientific information is provided so that people can be comfortable with their decisions for their families so while I think it's always a temptation to go down the rabbit hole that's something that that I work very hard to personally not only practice myself but also educate other physicians that I work with and younger physicians and medical students and again young residents I have some interaction with people still in training to remind people that our mission is to take care of the patients and our mission is to ensure that appropriate information is out there and to be able to rise above any personal concerns or personal frustrations in order to take care of the patient

Keith: it's obvious you're a better person than I am because I would be very tempted to give in to frustration you just want to shake people by the lapels the coats going listen but I completely understand what you're saying and appreciate that there's people like you doing your thing instead of people like me doing your thing just just to end up right so we are decidedly saying that immunizations of vaccines are a great thing and so where can parents get affordable immunizations for their children

Dr. Landers: well certainly we're very fortunate in Alabama that Medicaid and also the chip program covers many children that are our lower-income children that might not have insurance or their parents or guardians health care plans and then obviously our private insurance the really the ways to receive vaccinations in Alabama is first of all if you're insured or if you have Medicaid or chip and you obviously have a private provider as a result of that a family physician or a pediatrician then get your vaccine at your physician's office if if your plan for some reason does not cover that then certainly you can receive your childhood vaccinations through the Alabama Department of Public Health through our vaccine for children's program or vfc which is actually a nationwide program through these Centers for Disease Control and again we have vfc vaccine available vaccine for children that's actually what it's called but also there are vaccines available through your private provider now for adults certainly it's something it's very important to be aware that adults still need vaccines to I think most people associate vaccines with children but we need to be up-to-date on our adults vaccine just for example more recently we've had hepatitis A in northern Alabama and certainly certain populations need hepatitis A vaccine but pharmacists now vaccinate for certain illnesses so I think it's very important for adults to be aware that there are vaccines available through their local pharmacies not every pharmacy vaccinates but many pharmacies do so you really have the option of your private physician or your private clinic or through the Health Department and again for adults through your pharmacy that might be a vaccinator

Keith: one other question that just came to me and I may never get a chance to talk to you again so I'm gonna ask it now while I have the opportunity a couple of years ago when we had this Ebola scare there was a huge push I remember following in the news a huge push of finding this vaccine for Ebola now I think and I may be wrong but I think there's a misconception of that the vaccine for Ebola would have helped somebody who was already infected with ebola that's not how vaccines work and that's not am I correct in that?

Dr. Landers: well it depends upon the vaccine actually for example and just to digress a moment for Ebola to be aware of the the viral hemorrhagic fever the Ebola virus being one of the viral hemorrhagic fevers you know primarily occur in certain parts of the world and the Ebola outbreak a few years ago was you know primarily in in Africa in Liberia Sierra Leone a couple of those countries over there I actually had done some of my ebola training at again Fort Detrick Maryland before they moved the Ebola containment center over to the National Institute of Health a number of years ago but again to be aware that while a lot of studies are going on with field trials for the Ebola vaccine you know in that particular instance at least if a vaccine had been available it probably would not have interfered with the natural course of the Ebola disease but there are some vaccines and let's just go back to MMR for example if the person is exposed to measles and they've never been vaccinated for measles and they're in an appropriate age group which you know we might have to lower the age group in an outbreak situation we might have to give Measles vaccine to children six months of age and above its recommended one year to base age and above for now but if a person is exposed to measles if they have never been vaccinated for measles and if they take the measles vaccine within 72 hours of the exposure they're very unlikely to contract Measles another example is hepatitis a if a person is exposed to hepatitis A they've never been vaccinated for hepatitis A and they take the hepatitis A vaccine actually within a couple of weeks they're very unlikely to develop hepatitis A so in some instances vaccines and we could go on with others but time doesn't permit in some instances vaccine being given with a very short period of time during the incubation period of the disease can actually reduce the risk of the person developing the disease so again it depends on the disease it depends on the vaccine but it's you know it's possible with some vaccines not with others but it's possible with some to actually interrupt the course of the incubation if the vaccine is given early enough during the incubation period

Keith: okay well I'm glad to know that because that helps me put some plots of TV shows and movies in a better light now I appreciate that

Dr. Landers: yes TV shows and movies certainly have have done a lot to provide a I guess they're not say interesting storylines for vaccines but not not always correct unfortunately

Keith: first time I learned that there was fiction in the world I was kind of kind of crushed about that but anyways dr. Landers I greatly appreciate your time I have monopolized far too much of it this afternoon so I greatly appreciate you talking with me for the podcast I have learned quite a lot and I hope our listeners have too and I feel feel really good about things with wonderful people such as yourself on the front lines of our health

Dr. Landers: well thank you you've been very kind and again we certainly appreciate at the Alabama Department of Health the opportunity to continue to provide information to the general public answer questions and ensure that people have the most appropriate information to protect themselves to protect their health

Keith: I really appreciate it

Dr. Landers: thank you so much

Ukulele Music