

Q: Scientists think they found the culprit
welcome to SBH Bronx health talk
produced by sbh health system and
broadcast from the beautiful studios at
st. Barnabas Hospital in the Bronx, I'm
Stephen Clark. Health officials say they have
additional evidence that a certain
chemical compound vitamin E acetate is
the primary culprit of the National
outbreak of vaping illnesses. Nearly
2,300 Americans who vape have gotten
sick since March, many of them teens and
young adults and at last count 47 have
died. With us today to discuss the
dangers of vaping is Dr. Raghu Loganathan director a division of ICU
pulmonary medicine at SBH Health System,
welcome Dr. Loganathan.

A: Thank you Steve glad to be here.

Q: So e-cigarettes have been around for
some time now, why are we now hearing
about these serious issues?

*A: E-cigarette have been there for a few years, but
physicians have always had concerns on
what its long-term effectiveness is, as
well as its safety .When e cigarettes and
similar products were introduced several
years back. They weren't tested the
similar fashion as nicotine replacement
products like a nicotine gum or nicotine
inhaler that we use to help patients
quit smoking. They didn't go through the
same rigorous standards and checks and
they were introduced into the market and
now we realize that number of patients
have been hospitalized with severe
illnesses, what we would call vaping
associated pulmonary illness, or VAPI,
and it turns out that it's a result of a
number of the additives that are added*

to stabilize the nicotine or THC, the two more common products that are used in vaping and that in turn leads to severe illnesses.

Q: But how come we never really heard anything about the real serious repercussions of this until this year?

A: I think the use of vaping by the public has gone up exponentially in the past two or three years. It also is true that a number of the products are coming in through the black market where it's unregulated and THC oils or for that matter even nicotine related vaping products, we have some liquids that are used to stabilize the particular liquid in the container and when it's vaporized at a very high temperature it releases a number of toxic agents. We were aware related to the cotton vaping products that chemicals like glycerol and Pollock diacetyl heavy metals we're being used and we didn't have any studies looking at long-term effects but now we've had at least close to about 50 deaths, probably more than that at this time, and it turns out that there are certain clear bad actors that have been identified at least in some of the deaths but we still do this the story is still unfolding.

Q: Now what is this vitamin E acetate in familiar with that and how does it affect the lungs?

A: So vitamin E Acetate it's at least one chemical that is used in THC oils and this has

been found as a common factor and at least about 26 of the many deaths that we've had related to vaping illnesses. However, we still don't know what caused deaths in the other remaining patients who have had similar presentations and similar clinical syndromes. Vitamin E acetate men vaporized at very high levels can cause variety of problems in the lungs including injuring the lung airway lining causing severe intense inflammation where patients get extremely short of breath, severely depleted of oxygen, and either end up dying, or if they survive they end up with very severe lung consequences often requiring even in the consideration for lung transplant and these are young relatively young patients unfortunately.

Q: I know there was an incident of a young man in the Bronx who died, are you familiar with that situation?

A: I'm familiar to the point of what I've read in the media reports I was not personally involved in the care of the patient, I know there have been two deaths at least in New York State since the at least the reporting of these illnesses and it turns out that there's a young kid who is using a THC based vaping system and in turn led to its death they've been multiple such reports across the country and within a short span of few months we've had close to 2,300 cases which is a staggering number.

Q: Have you seen a high incidence of vaping in the Bronx?

A: We actually haven't we probably it's also a factor that we haven't necessarily as physicians and as a community gone back and systematically asked each patient who we see in the clinic or in the hospital if they've been vaping or not, and this has been an eye-opener in the past several months in terms of all these illnesses that are coming by and yes we do ask them, we still see a number of patients who are unfortunately addicted to smoking but also it's fortunate that they haven't taken on vaping at least in my clinical experience in our asthma and pulmonary clinics.

Q: I know we we have a rather proactive smoking cessation program at SBH. I'm assuming there are other options that you recommend outside of vaping for those who want to stop smoking right?

A: I would strongly recommend that. I would actually ask anyone who's listening to this podcast to go speak your providers about smoking, quitting smoking is hard it's not easy we recognize that it is an addiction and it's not easy to quit smoking just by a single method by either giving a nicotine replacement therapy or not. There multiple strategies it's important to be enrolled in a smoking cessation clinic we have one at St. Barnabas with anybody can easily reach them and seek help or speak to your primary provider. New York City has a number of resources to help you quit smoking using products that have been well tested knowing their side effects is more important than using products

like vaping where a lot is left and a key start we discovered in terms of what the long-term side effects are and its complications.

Q: now you know from what I've read I'm sure you've read too it's especially dangerous to teenagers who seemed a propensity for the flavors and it's sort of become cool and a lot of kids are moving in that direction what would you say to that?

A: it's an unfortunate outcome in terms of how the vaping companies have released the products and to an extent FDA are not regulating them in fact we've had many reports that suggest 30 to 40% of high school students vape. About 10 to 15% of middle school students, think about this before your ninth grade, they are taking on vaping and a large part of that is motivated by the fact that they are flavored. There are at least about a thousand different flavors that exist in the market both in the legal as well as a black market in terms of all these substances that are used. Diacetyl a well-known chemical that is used among these flavoring a flavoring products clearly can cause lung injury and unfortunately young people who get hooked onto this at a very young age can lead to addictive behaviors brain develops until the age of 25. Nicotine clearly is an addictive chemical and when we have high school students were taking these products at such a young age it's very likely that they're gonna have subsequent complications including mood disorders

euphoria decreased attention and you're injuring the brain it's not formed yet completely there are many parts of the brain that is still forming and developing until the age of 25, it's a it's a real public issue health issue that needs to be addressed and I'm happy I was hearing on the news last night on an on NPR that New York City has now introduced a bill to ban flavored E-cigarettes and I think that would be an important aspect in terms of containing this health crisis.

Q: As a parent if you notice that your team is either hanging out with other kids who vape or is interested in vaping what do you do?

A: I think we need to talk to them we need to talk to them up with the real facts on the consequences of vaping we need to there are enough resources on the Internet in terms of the bad things that can happen with vaping looking at young people who are in their teens or 20s not able to walk after surviving a vaping lung related and lung illness or end up having getting lung transplants, it's tragic, it's devastating and that's not the life anybody wants to live and I would encourage parents to get their teens to get some help from their physician providers maybe from their school there are a lot of resources a number of school districts have introduced a number of public health campaigns to discourage vaping and making sure that people don't end up using this off the black market as well.

Q: Well regardless of your age if you are vaping are there certain signs or symptoms that would indicate you got to stop?

A Specific to what we now recognize as being associated pulmonary injury the symptoms are generally non-specific, what do I mean by that? It can affect your lungs he can have some shortness of breath he can have some cough you can have some constitutional symptoms like fevers Molly is not feeling well and you can have some gastrointestinal symptoms like diarrhea and stomach upset when you have these symptoms in your vaping you should go seek medical attention. It's important to let the physicians know that you have been vaping because right now I think the health care community is also coping with how they address this condition and it's true that not all physicians are asking about vaping when they seeing patients coming in with these symptoms, so it's very important for the public to know to go and let the physicians know I have been vaping these the product that have been using I'm having these symptoms and it's better to catch these conditions early on, as opposed to being in a nice you on respiratory life-support and artificial life support systems.

Q: Are there certain people who may be more susceptible to an illness from vaping than others?

A: It's not very clear although a number of patients who have been affected so far have been in the younger

age group between 17 and 30 or 40 years although we have seen cases reported as much as even 75 years. It may be also because that the young age group is using more the vaping products than the older age group. It's still not clear and I think this more to be learnt and from from this particular aspect. I think one of the important signals that we're getting from reviewing these vaping cases are that black-market sourced vaping products are even further uncontrolled, we don't know what's happening in the legal market the black market it's gonna be even worse they use various types of THC oils, hash oils, and there's absolutely no kind of controls on these and those are you're exposing your body and your lungs to devastating chemicals and possibly irreversible injury. You probably want to end up with this consequence even if you survive you end up with a lot of problems that can remain for a very long time and this can affect at a very young age.

Q: Let me shift gears a little bit we have a couple of minutes left you initiated a very effective lung cancer screening program, how is that going?

A: It's going quite well and we actually want to have one of the largest recruitment centers in terms of lung cancer screening, I would strongly encourage again people who are listening to this podcast to talk your providers if you've smoked more than one packet of cigarettes a day for about 30 years on an average, it doesn't have to be specific, it doesn't have to be the exact

number. Talk your providers and see if you're eligible for a lung cancer screening you can pick up lung cancer very early on it's an approved test by Medicare and Medicaid Services and the insurance plans you just need to have a clear discussion with your primary provider and they can send send you over to the lung cancer screening even if you're not eligible for lung cancer screening, smoking is bad I'm sure you all have heard this but it's true that at least you have good eight to ten different types of cancers that can happen because of smoking. Heart disease, stroke, kidney failure, requiring dialysis these are real issues. Seek help in terms of quitting smoking, and I'm repeating what I said earlier it is hard it is challenging but there are providers who work with you provide behavioral therapy options they couldn't replacement options use your family and friends you holidays are coming up this may be a good time to motivate yourself in terms of trying to quit smoking and trying to get the help you need.

Q: Last note I know just in driving through the Bronx, I'm always shocked to see how many people smoke in the Bronx. I mean you're in the front lines you must notice that all the time right?

A: It's true that in the city areas, in any major city, there's a lot more smoking and unfortunately it still remains prevalent, I think we need to do more in terms of educating people about the risks of smoking and provide more resources it's not easy but it can be done.

Q: Dr. Loganathan thank you very much for joining us in SBH Bronx Health Talk.
For more information on services available at SPB health system. visit www.sbhny.org and thank you for joining us today.

A: Thank you Steve, pleasure to be Here.