Each week, the number of confirmed and probable cases of lung disease and death toll associated with e-cigarette product use, or vaping continues to climb. The CDC has provided updates every Thursday with the exception being on Thursday, November 28th (Thanksgiving Day.)

On Thursday, December 5th , the Centers for Disease Control and Prevention (CDC) announced the updated figures as follows:

- **As of December 4, 2019, 2,291 cases of hospitalized e-cigarette, or vaping, product use associated lung injury (EVALI) were reported by all 50 states, now including Alaska, the District of Columbia, and 2 U.S. territories (Puerto Rico, and the U.S. Virgin Islands).**
    - **On December 3rd, the Alaska Department of Health and Social Services confirmed that Alaska has its first case of e-cigarette-related lung injury, a teen from Southeast Alaska.**
    - **As of December 3, 2019, CDC will only report hospitalized EVALI cases and EVALI deaths regardless of hospitalization status. CDC has removed non-hospitalized cases from previously reported case counts.**
    - **Due to only reporting hospitalized EVALI cases as of December 3, 2019, CDC removed 175 non-hospitalized cases from previously reported national case.**

- **As of December 4, 2019, 48 deaths have been confirmed in 25 states and the District of Columbia:**
    - **Alabama, California, Connecticut, Delaware, the District of Columbia, Florida, Georgia, Illinois, Indiana, Kansas, Louisiana, Massachusetts, Michigan, Minnesota, Mississippi, Missouri,**

Montana, Nebraska, New Jersey, New York, Oregon, Pennsylvania, Tennessee, Texas, Utah, and Virginia.

- **This reflects a rise of 1 death from the last report of 47 deaths on November 20th .**

CDC has analyzed national data on use of THC-containing product brands by hospitalized EVALI patients who reported using THC-containing e-cigarette, or vaping product brands:

- **Overall, 152 different THC-containing product brands were reported by EVALI patients.**
- **Dank Vapes, a class of largely counterfeit THC-containing products of unknown origin, was the most commonly reported product brand used by patients nationwide, although there are regional differences.**
- **The most commonly reported product brand included Dank vapes (56%), followed by TKO (15%), Smart Cart (13%), and Rove (12%). However, regional difference in THC-containing product use were noted.**
- **While Dank Vapes was most commonly reported in the Northeast and South, TKO and Smart Cart brands were more commonly reported by patients in the West and Rove was more common in the Midwest.**
- **The data further supports that EVALI is associated with THC-containing products and that it is not likely associated with a single THC-containing product brand.**

CDC recommends that individuals should not use THC-containing e-cigarette, or vaping, products, particularly from informal sources like friends, family, or in-person or online dealers. In addition, individuals should not add any substances to e-cigarette or vaping products that are not intended by the manufacturer, including products purchased through retail establishments.

THC-containing products continue to be the most commonly reported e-cigarettes, or vaping, products used by EVALI patients, and it appears that vitamin E acetate is associated with EVALI. However, many substances and product sources are being investigated, and there might be more than one cause. Therefore, while the investigation continues, persons should consider refraining from the use of all e-cigarette, or vaping, products.

The CDC has identified vitamin E acetate as a chemical of concern among people with e-cigarette, or vaping, product use associated lung injury (EVALI):

- **Analyses of bronchoalveolar lavage (BAL) fluid samples (or samples of fluid collected from the lungs) of patients identified vitamin E acetate, an additive in some THC-containing products.**
- **Recent CDC laboratory test results of BAL samples from 29 patients submitted to CDC from 10 states identified vitamin E acetate in all BAL fluid samples.**
- **THC was identified in 82% of the samples and nicotine was identified in 62% of the samples.**
- **These findings provide direct evidence of vitamin E acetate at the primary site of injury within the lungs.**

Vitamin E acetate is used as an additive in the production of e-cigarette, or vaping, products, because it resembles THC oil. Vitamin E acetate is also used as a thickening ingredient in e-liquids. Vitamin E is a vitamin found in many foods, including vegetable oils, cereals, meat, fruits, and vegetables. It is also available as a dietary supplement and in many cosmetic products, like skin creams. Vitamin E acetate usually does not cause harm when ingested as a vitamin supplement or applied to the skin. However, previous research suggests when vitamin E acetate is inhaled, it may interfere with normal lung functioning.

CDC tested for a range of other chemicals that might be found in e-cigarette, or vaping, products, including plant oils, petroleum distillates like mineral oil, MCT oil, and terpenes (which are compounds found in or added to THC products). None of these potential chemicals of concern were detected in the BAL fluid samples tested.

All e-cigarette, or vaping, product use associated lung injury EVALI patients have reported a history of using e-cigarette, or vaping, products. THC is present in most of the samples tested by FDA to date, and most patients report a history of using THC-containing products. The latest national and state findings suggest products containing THC, particularly from informal sources like friends, or family, or in-person or online dealers, are linked to most of the cases and play a major role in the outbreak.

These investigations are ongoing. CDC will provide updates when more information is available.

In lieu of the investigations, the CDC recommends the following:

- **Do not use e-cigarette, or vaping, products that contain THC.**
  - **THC use has been associated with a wide range of health effects, particularly with prolonged heavy use. The best way to avoid potentially harmful effects is to not use THC, including through e-cigarette, or vaping, products. Persons with marijuana use disorder should seek evidence-based treatment by a health care provider.**
- **Don't buy any type of e-cigarette, or vaping, products, particularly those containing THC, off the street.**
- **Don't modify or add any substances to e-cigarette, or vaping, products that are not intended by the manufacturer, including products purchased through retail establishments.**
- **Since the specific compound or ingredient causing lung injury are not yet known, the only way to assure that an individual is not at risk while the investigation continues is to consider refraining from use of all e-cigarette, or vaping, products.**
- **Adults using e-cigarettes to quit smoking should not go back to smoking; they should weigh all risks and benefits and consider utilize FDA-approved nicotine replacement therapies. Visit https://smokefree.gov/tools-tips/how-to-quit/using-nicotine-replacement-therapy.**
- **Until more is known, individuals who are concerned about these specific health risks linked to vaping, consider refraining from using e-cigarette or vaping products.**
- **If an individual continues to use an e-cigarette, or vaping, product, they should carefully monitor themselves for symptoms and see a healthcare provider immediately if they develop symptoms like those reported in this outbreak.**
  - **In many cases, those experiencing illness reported a gradual start of symptoms, including breathing difficulty, shortness of breath, and/or chest pain before hospitalization.**

    - **Some cases reported mild to moderate gastrointestinal illness including vomiting and diarrhea, or other symptoms such as fevers or fatigue.**
- **An adult who used e-cigarettes containing nicotine to quit cigarette smoking, should not return to smoking conventional cigarettes.**
- **The use of e-cigarettes is unsafe for kids, teens, and young adults and should not be used.**
- **Adults who do not currently use tobacco products should not start using e-cigarette products.**
- **Women who are pregnant should not use e-cigarette products.**
- **Adults who do not currently use tobacco products should not start using e-cigarette, or vaping, products. There is no safe tobacco product. All tobacco products, including e-cigarettes, carry a risk.**

Citing the reported cases of severe pulmonary disease linked to vaping and the rising death toll, the Bergen-Hudson Chronic Disease Coalition, administered by the Bergen County Department of Health Services from a grant funded by the New Jersey Department of Health Office of Cancer Control and Prevention (OCCP), encourage teens, adolescents, and adults who vape to follow the CDC recommendations and stop until more information is uncovered.

Information for this release was secured from the website of The Centers for Disease Control and Prevention (CDC) https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html#what-is-new.

Be well.
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