Is vaping a harmless activity? Is it clear that vaping is not good for your lungs, but the exact effects vaping has on your lungs is still in the initial stages of research.

When you smoke or vape, it involves heating a substance and inhaling the fumes. With vaping, a device heats a liquid which then turns in a vapor in which you inhale. The liquid or juice that is inhaled is an oily liquid base that gets deep down into the lungs and can cause an inflammatory response.

Vitamin E is often used in e-liquids, an irritant when inhaled into the lungs. Vitamin E has been found in the lungs of people with severe, vaping related damage. Other substances found in e-liquid or produced when heated up are diacetyl, formaldehyde, and acrolein. Diacetyl is a food additive used to deepen flavors but is known to damage small passageways in the lungs. Formaldehyde is a toxic chemical that can cause lung disease and contribute to heart disease. Acrolein is often used as a weed killer also known to cause damage to the lungs.

While experts do not know the full extent of the effects of vaping several lung diseases are associated with vaping.

Popcorn Lung is another name for Bronchiolitis Obliterans, a rare condition that results from damage of the lungs’ airways. Diacetyl found in e-liquid is known to cause Popcorn Lung. It causes inflammation and lead to permanent scarring in the smallest branches in the airways causing breathing difficulty. Symptoms include coughing, wheezing, chest pain and shortness of breath.

Vaping-related Lipoid Pneumonia develops when fatty acids enter the lungs, which is what may occur when oily substances in e-liquids are inhaled in the lungs. This creates an inflammatory response in the lungs. Symptoms include chronic cough, shortness of breath, and coughing up blood or blood-tinged mucous.

Spontaneous pneumothorax, collapsed lung, occurs when a small hole develops in lung and causes oxygen to escape. Vaping in individuals who are at risk for a pneumothorax may increase the chance of occurrence. Signs include sharp chest or shoulder pain, shortness of breath, and difficulty breathing.

Like smoking cigarettes, secondhand vapor is not safe for others since the harmful chemicals present are also present in the exhaled vapors. Lung cancer is also a concern due to the chemicals present in the liquids though the long-term effects are not completely known at this time.