Possible link between E-cigs, risk of infections

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(HealthDay)—Vapor from electronic cigarettes may increase young people's risk of respiratory infections, regardless of whether or not it contains nicotine, according to a new laboratory study reported in a recent issue of *PLOS ONE*.

For the study, researchers obtained respiratory system tissue from children aged 8 to 10 who had died and donated their organs to medical science. The human cells were placed in a sterile container at one end of a machine, with an e-cigarette at the other end. The machine applied suction to the e-cigarette to simulate the act of using the device, with the vapors produced by that suction traveling through tubes to the container holding the human cells.

The vapor spurred the release of interleukin-6, which occurred whether or not the vapor contained nicotine, although nicotine appeared to

slightly enhance the release of interleukin-6. The exposed lung tissue also appeared more susceptible to the common cold virus, developing higher amounts of virus compared to healthy cells that had not been exposed to the vapor. In follow-up testing, lab mice exposed to e-cigarette vapor also appeared more likely to become infected with rhinovirus, compared with unexposed mice.

The American Vaping Association, an industry group representing e-cigarette makers, said the study findings were limited because the tests involved cells in a laboratory, not actual people using e-cigarettes. The tests also failed to compare the effects of the vapor to other inhalants, the group said. "Many in public health agree that the risks of vaping must always be considered in the context of the risks of cigarette smoking and traditional stop-smoking therapies," Gregory Conley, president of the American Vaping Association, told *HealthDay*.

More information: Full Text