# Five Reasons to Include E-cigarettes in Smoke-free Laws

#### What are electronic, or e-cigarettes?

E-cigarettes are battery operated devices that heat and aerosolize liquid containing nicotine and other toxins. They may look like regular cigarettes, pens or markers, or have other designs. Users inhale and exhale a mix of gases and tiny particles in an aerosol that carries toxins into their lungs and into the air around them.

### 1. E-cigs pollute the air.<sup>2,3</sup>

- E-cigs give off tiny particles that travel deep into the lungs<sup>4</sup> and the bloodstream, causing disease.<sup>5</sup>
- E-cig particles can reach concentrations almost as high as in Lexington before the smoke-free law.<sup>2</sup>
- Visible aerosol from e-smoking contains harmful chemicals known to cause cancer.<sup>6</sup>
- Workers and patrons are exposed to secondhand aerosol from e-cigarettes used inside.

## 2. E-cigs give off aerosol, not water vapor, including:

- Propylene glycol (lung and eye irritant)<sup>7</sup>
- Formaldehyde <sup>2,7</sup> and β-nicotyrine (cause cancer)<sup>8</sup>
- Metal & silicate particles (toxic to human cells)<sup>3</sup>
- Nicotine (addictive and harmful to unborn babies)<sup>7,8</sup>

#### 3. E-cigs undermine smoke-free laws by making enforcement confusing. 9,10

- Customers may not patronize the business, thinking regular smoking is allowed.
- Employees may not know who is violating the law.

#### 4. Delayed regulations on manufacture = no consumer protection. 11

- No way to know what users are breathing in or putting into the air for others to breathe.
- No protection from dangerous design flaws or user modifications.

#### 5. Early research shows lung and blood effects similar to smoking.

- Five minutes of e-cigarette use has lung effects similar to tobacco smoke. 12
- Airways become inflamed after using e-cigarettes containing nicotine.<sup>2</sup>
- Blood cell changes could contribute to heart and blood vessel disease.<sup>13</sup>

## Keep our Indoor Air Clean and Healthy!

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