# **Legislative Analysis**



### SMOKE ALARM BATTERY STANDARD ACT

Phone: (517) 373-8080 http://www.house.mi.gov/hfa

House Bill 4382 as reported from committee

**Sponsor: Rep. Mike Mueller Committee: Regulatory Reform** 

**Complete to 4-9-21** 

Analysis available at http://www.legislature.mi.gov

**BRIEF SUMMARY:** House Bill 4382 would create a new act to require, beginning April 1, 2022, that smoke detector units sold in Michigan be powered by a nonremovable, 10-year battery. The bill would not apply to systems that are wireless or hardwired into a building.

*FISCAL IMPACT:* House Bill 4382 would not have an appreciable fiscal impact on the Department of Licensing and Regulatory Affairs (LARA) or any other unit of state or local government. The bill would allow LARA to promulgate rules, but this would not create a fiscal impact for the department.

## THE APPARENT PROBLEM:

Working smoke detectors significantly reduce the risk of dying in a home fire. Often, deaths are caused by inhaling the smoke, which can contain toxic fumes, rather than the fire itself. Reportedly, when most furnishings were made with natural materials, people had about 15 to 17 minutes to escape a burning building before being overcome by toxic fumes. Now, with many furnishings made of synthetic materials, which burn more quickly and release more toxic gases, people have about 3 minutes to escape. The difference between life and death can be the minutes of early warning provided by smoke alarms. All too often after a fire, however, smoke alarms, if present, are found to contain either dead batteries or no batteries at all.

Recently, smoke alarm device technology has advanced to make available nontamperable models with sealed battery compartments containing lithium batteries that last at least 10 years. It is believed that if all smoke alarms sold in the state had the newer technology, more lives could be saved.

## THE CONTENT OF THE BILL:

House Bill 4382 would create a new act called the Smoke Alarm Battery Standard Act.

The new act would prohibit, beginning April 1, 2022, the sale, offer for sale, distribution, or importation into the state of a smoke alarm device powered by a replaceable and removable battery. Instead, also beginning April 1, 2022, a device would have to be powered for not less than 10 years either by a nonremovable and nonreplaceable battery (e.g., a lithium ion battery in a sealed unit) or by another power source that utilizes new technology.

The new act would not apply to systems that are hardwired into a building or that are wireless or Wi-Fi connected. Specifically, the bill would exempt the following:

• A fire alarm, smoke detector, or smoke alarm that receives power, or that has an ancillary component that receives power, from an electrical system of a building.

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- A fire alarm, smoke detector, or smoke alarm that is electronically connected, or that has an ancillary component that is electronically connected, as part of a centrally monitored or supervised alarm system.
- A fire alarm, smoke detector, or smoke alarm that uses, or that has an ancillary component that uses, one or more of the following:
  - A low-power radio frequency wireless communication signal.
  - o Wi-Fi or other wireless local area networking capability to send and receive notifications to and from the internet.
- Any other smoke alarm device with equivalent characteristics to a device described above, as determined by rules that the bill would allow LARA to promulgate in consultation with the state fire marshal under the Administrative Procedures Act.

The new act would apply to a *person* selling, offering to sell, distributing, or importing a smoke alarm device on or after April 1, 2022.

Person would mean an individual, estate, business or nonprofit entity, public corporation, government or governmental subdivision, agency, or instrumentality, or other legal entity.

#### **BACKGROUND INFORMATION:**

House Bill 4382 is virtually identical to HB 5407 of the 2019-20 legislative session. That bill was passed by the House of Representatives.

## **ARGUMENTS:**

#### For:

In 2020, 122 Michiganders died in home fires. In the first three months of 2021, 37 fires resulted in the deaths of 33 Michiganders, an 18% increase over the same time period in 2020. Working smoke alarms can significantly reduce the risk of dying in a fire. Yet, despite years of warnings, public service announcements, and even free smoke alarm giveaways, scores of people die every year. Some older homes have no smoke alarms. Others have nonworking devices because the batteries either were not replaced when they died or were removed because the alarm was chirping or went off too often when dinner was cooking and were then forgotten about. An increase in deaths from home fires has also been noted around Christmas, when batteries are removed from smoke alarms to use in battery-operated gifts.

Newer technologies in smoke alarms address many of these issues. Newer models come with a built-in lithium battery that lasts a decade. When the device begins to fail, it can easily be recycled and replaced with a new one. The battery compartment is sealed, which prevents the battery or batteries from being removed. In addition, a new standard for smoke detectors will go into effect in mid-2021 that increases the device's sensitivity to particulates released by the types of materials that are used in modern furnishings and that pose the greatest danger for asphyxiation and reduces sensitivity to smoke from regular cooking that does not pose a danger. Although the new models the bill would require to be sold in the state after April 1, 2022, are slightly more expensive than models currently on the market, consumers are expected to save money over the device's lifespan due to not having to replace the battery. By some estimates, the savings could be as high as \$40 to \$60 per unit over the life of the device. In

addition, having properly installed and working smoke detectors will save lives. As noted above, the bill would apply only to individual units that are battery operated and not to smoke alarm systems that are hardwired into a building (e.g., found in new construction) or that are wireless or Wi-Fi connected. Similar measures in other states have proven to save lives.

## Against:

No arguments in opposition to the bill were raised in committee.

#### **POSITIONS:**

The following entities indicated support for the bill (3-16-21):

- Michigan Association of Fire Chiefs
- **KIDDE**

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<sup>■</sup> This analysis was prepared by nonpartisan House Fiscal Agency staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.