### OPLA RESEARCH REQUEST MEMO

To: Rachel Olson, Legislative Analyst, IDEA Committee

From: Kristin Brawn, Legislative Researcher

Date: 3/8/21

RE: Statistics for Electrical Injuries/Fatalities and Fires Caused by Electrical Wiring in Maine (LD 126)

#### Hi Rachel,

You asked me to find statistics for injuries and fatalities involving electrical work and fires caused by electrical wiring in Maine. Please see my findings below.

# I. Electrical Injuries and Fatalities

The following tables display data obtained from the Bureau of Labor Statistics <u>Occupational Injuries/Illnesses and Fatal Injuries Profiles</u> regarding electricity-related occupational injuries and fatalities in Maine.

### **Electrical Injuries and Fatalities in Maine 2011-2019**

	2011	2012	2013	2014	2015
Nonfatal occupational injuries –	20	0	0	0	0
Exposure to electricity					
Nonfatal occupational injuries –	50	30	30	60	60
Electricians					
Fatal injuries – Exposure to electricity	1	2	0	0	0
Fatal injuries - Electricians	0	0	0	0	0

	2016	2017	2018	2019
Nonfatal occupational injuries –	0	0	0	0
exposure to electricity				
Nonfatal occupational injuries -	80	30	30	90
Electricians				
Fatal injuries – Exposure to electricity	0	0	0	0
Fatal injuries – Electricians	0	0	0	0

As shown in the tables above, Maine's only incidents of nonfatal occupational injuries from exposure to electricity occurred in 2011, with 20 incidents reported. However, when the data were filtered to reflect nonfatal occupational injuries among electricians, injuries were reported in every year, with a high of 90 injuries reported in 2019. However, it important to note that most of the occupational injuries reported for electricians may not be injuries related to electricity, as the only injuries in Maine related to exposure to electricity occurred in 2011 and were not reported in any other year.

In regard to fatal injuries related to exposure to electricity, 1 fatality was reported in 2011, and 2 fatalities were reported in 2012. However, there were no occupational fatalities reported for electricians in 2011 and 2012, nor for any other year. Therefore, it is possible that these fatalities were related to another occupation and not electricians.

# II. Fires for Which the Heat Source Was Electrical Arcing

The following table displays data compiled from the <u>Maine Office of State Fire Marshal Annual Reports</u> regarding fires in Maine for which the heat source was determined to be electrical arcing.

Fires in Maine – Electrical Arcing Determined to be Fire Heat Source 2008-2018

2008	2009	2010	2011	2012	2013
133	141	143	145	No report	164
2014	2015	2016	2017	2018	
171	200	202	208	248	

2008	2009	2010	2011	2012	2013
5.99%	5.39%	5.85%	6.12%	No report	6.10%
2014	2015	2016	2017	2018	
N/A	N/A	N/A	N/A	N/A	

As shown, from 2008-2013, electrical arcing was determined to be the heat source for 5% to 6% of the fires in Maine. Percentages for 2014-2018 were not available.

I hope you find this information helpful. If you have any questions, or would like me to do further research on these topics, please let me know.