



# **2024 Heat-associated Deaths & Emergency Department Visits Clark County, NV**

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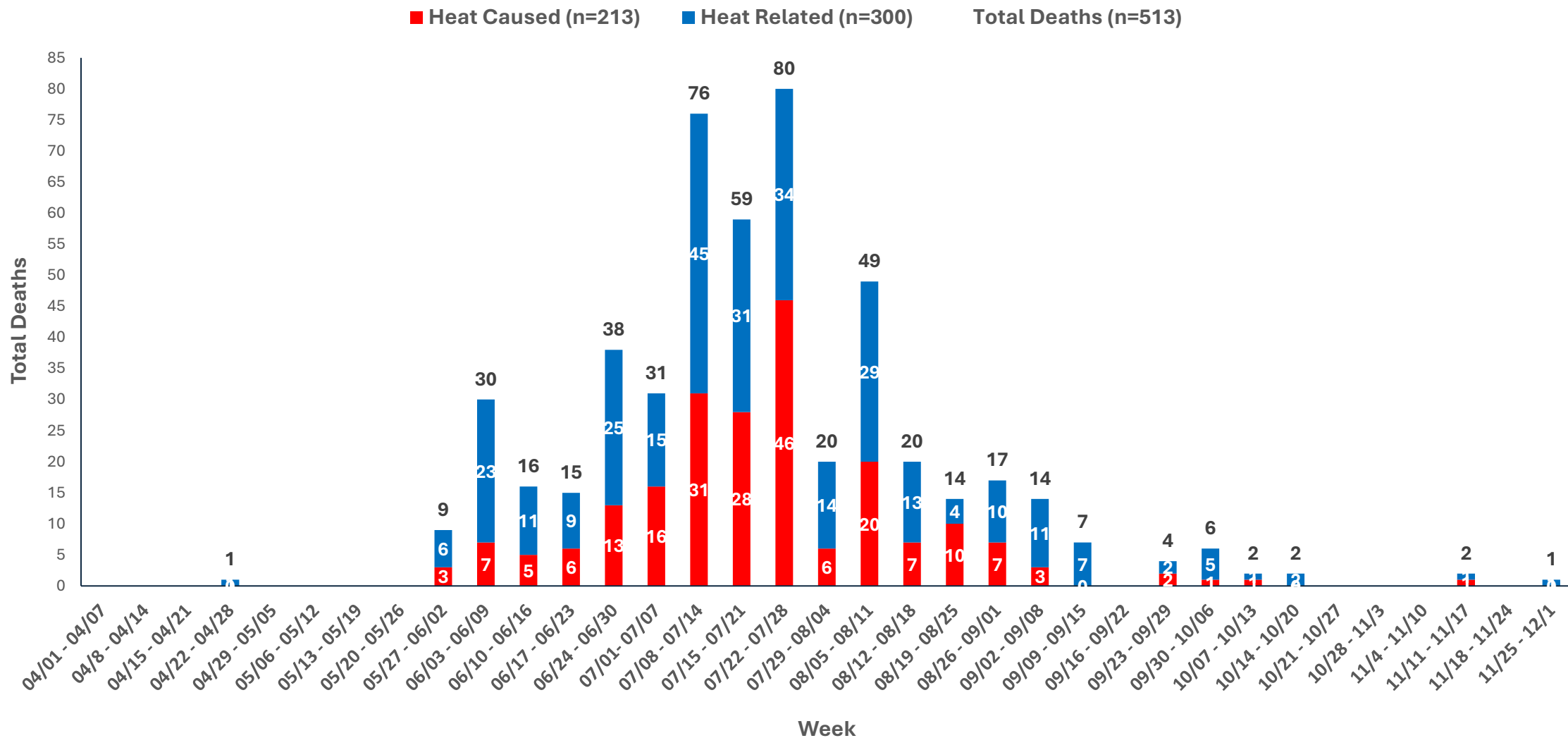
# Heat-Associated Deaths

# Heat-associated Deaths, 2024

## Clark County, NV

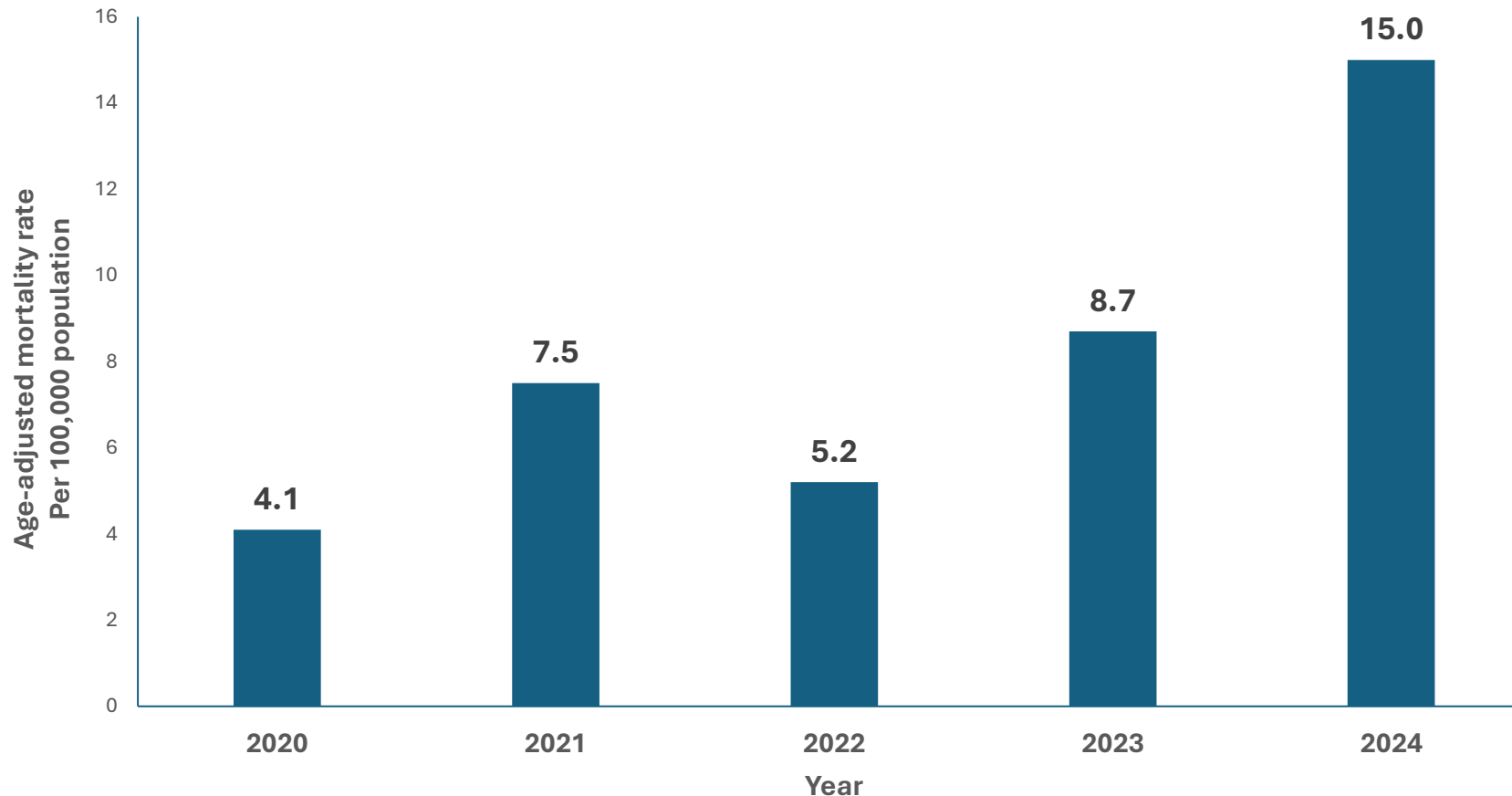
- 513 heat-associated deaths occurred in Clark County, NV
  - 526 reported by the Clark County Office of the Coroner/Medical Examiner
- 73% increase in deaths compared to 2023 (296)
- 23% non-Clark County residents

# Heat-associated Deaths by Week, 2024

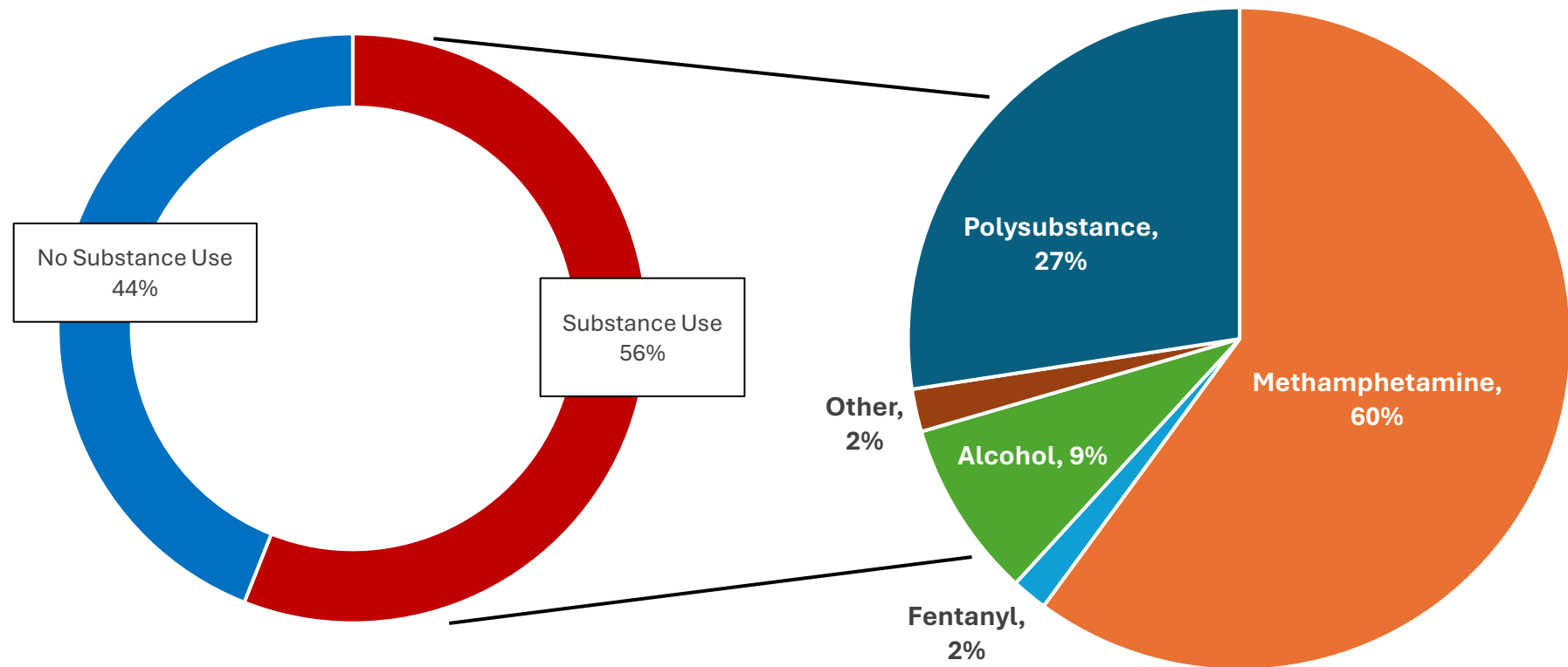


# Heat-associated Deaths, 2024

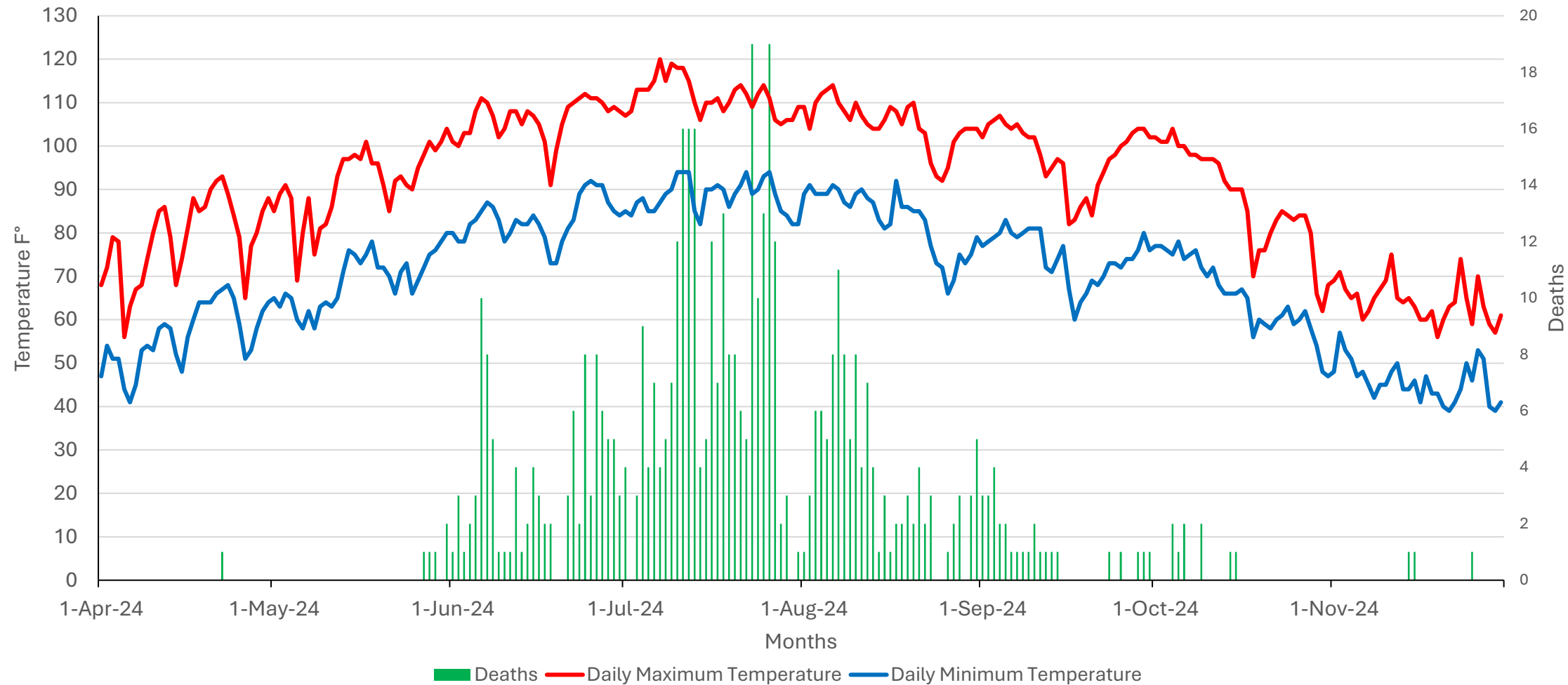
## Age-adjusted mortality rate, Clark County Residents



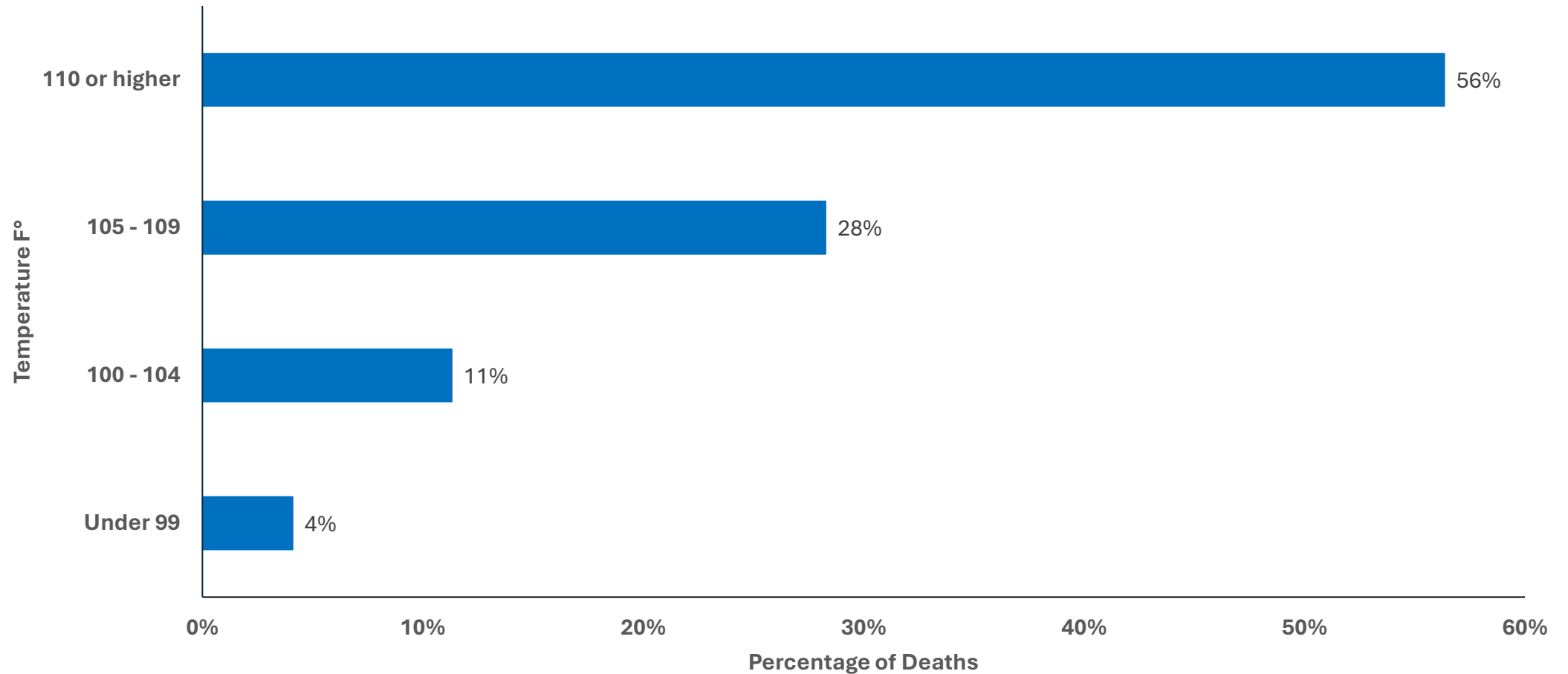
# Heat-associated Deaths and Substance Use, 2024



# Heat-associated Deaths by Day and Maximum/Minimum Temperature, 2024



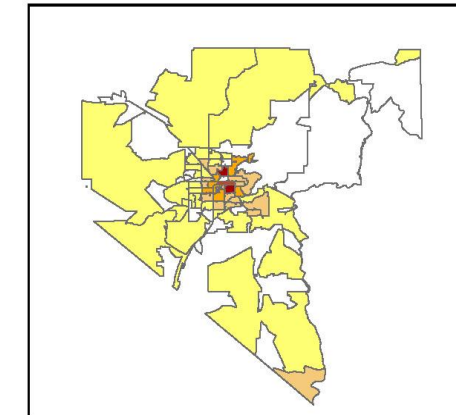
# Heat-associated Deaths by Maximum Temperature





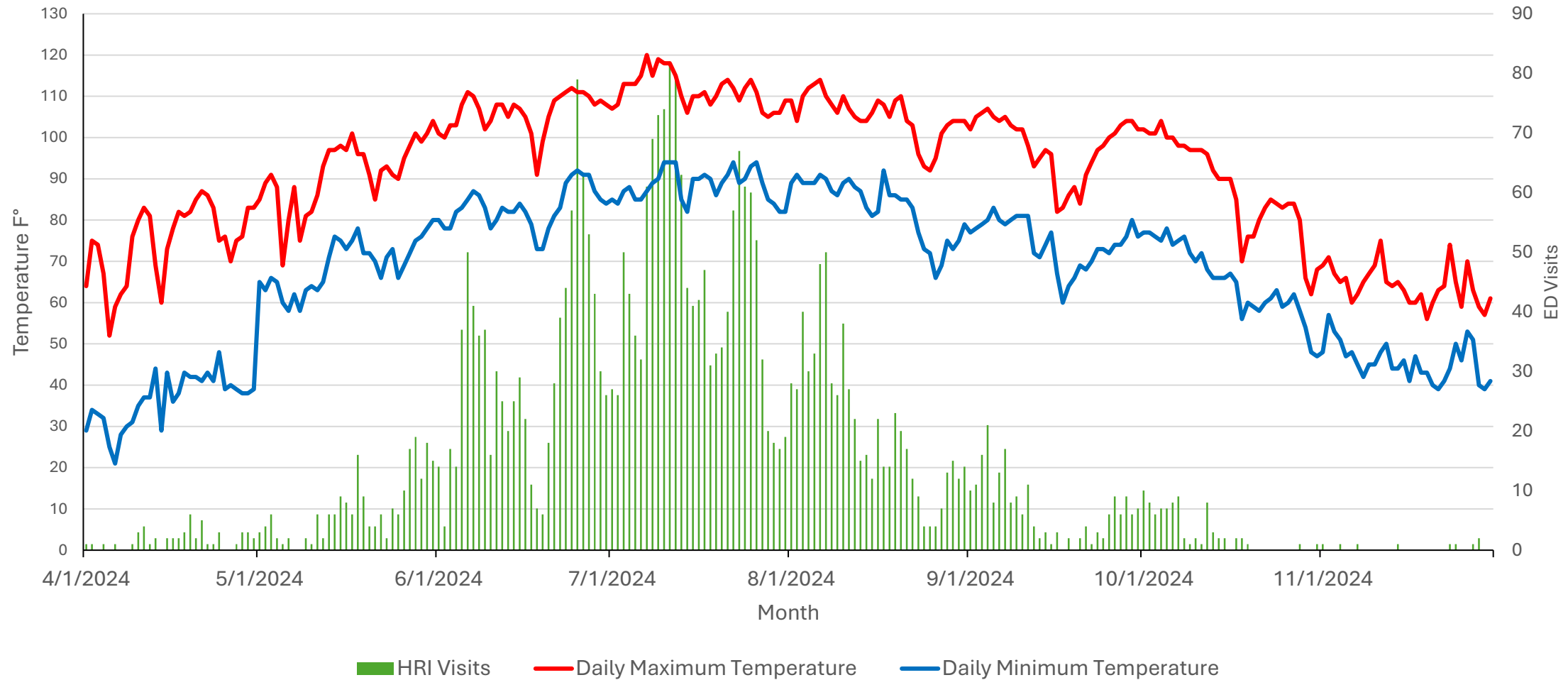
The map displays the 89th Congressional District in California, which is highlighted in a darker blue. The district is located in the central part of the state, covering parts of Kern, Santa Barbara, and San Luis Obispo counties. The map is color-coded by county: yellow for Kern, orange for Santa Barbara, and light blue for San Luis Obispo. Major cities within the district include Santa Barbara, Santa Maria, and San Luis Obispo. The map also shows the district's boundaries with neighboring districts, which are labeled with numbers like 89001, 89002, 89003, 89004, 89005, 89006, 89007, 89008, 89009, 89010, 89011, 89012, 89013, 89014, 89015, 89016, 89017, 89018, 89019, 89020, 89021, 89022, 89023, 89024, 89025, 89026, 89027, 89028, 89029, 89030, 89031, 89032, 89033, 89034, 89035, 89036, 89037, 89038, 89039, 89040, 89041, 89042, 89043, 89044, 89045, 89046, 89047, 89048, 89049, 89050, 89051, 89052, 89053, 89054, 89055, 89056, 89057, 89058, 89059, 89060, 89061, 89062, 89063, 89064, 89065, 89066, 89067, 89068, 89069, 89070, 89071, 89072, 89073, 89074, 89075, 89076, 89077, 89078, 89079, 89080, 89081, 89082, 89083, 89084, 89085, 89086, 89087, 89088, 89089, 89090, 89091, 89092, 89093, 89094, 89095, 89096, 89097, 89098, 89099, 89100, 89101, 89102, 89103, 89104, 89105, 89106, 89107, 89108, 89109, 89110, 89111, 89112, 89113, 89114, 89115, 89116, 89117, 89118, 89119, 89120, 89121, 89122, 89123, 89124, 89125, 89126, 89127, 89128, 89129, 89130, 89131, 89132, 89133, 89134, 89135, 89136, 89137, 89138, 89139, 89140, 89141, 89142, 89143, 89144, 89145, 89146, 89147, 89148, 89149, 89150, 89151, 89152, 89153, 89154, 89155, 89156, 89157, 89158, 89159, 89160, 89161, 89162, 89163, 89164, 89165, 89166, 89167, 89168, 89169, 89170, 89171, 89172, 89173, 89174, 89175, 89176, 89177, 89178, 89179, 89180, 89181, 89182, 89183, 89184, 89185, 89186, 89187, 89188, 89189, 89190, 89191, 89192, 89193, 89194, 89195, 89196, 89197, 89198, 89199, 89200, 89201, 89202, 89203, 89204, 89205, 89206, 89207, 89208, 89209, 89210, 89211, 89212, 89213, 89214, 89215, 89216, 89217, 89218, 89219, 89220, 89221, 89222, 89223, 89224, 89225, 89226, 89227, 89228, 89229, 89230, 89231, 89232, 89233, 89234, 89235, 89236, 89237, 89238, 89239, 89240, 89241, 89242, 89243, 89244, 89245, 89246, 89247, 89248, 89249, 89250, 89251, 89252, 89253, 89254, 89255, 89256, 89257, 89258, 89259, 89260, 89261, 89262, 89263, 89264, 89265, 89266, 89267, 89268, 89269, 89270, 89271, 89272, 89273, 89274, 89275, 89276, 89277, 89278, 89279, 89280, 89281, 89282, 89283, 89284, 89285, 89286, 89287, 89288, 89289, 89290, 89291, 89292, 89293, 89294, 89295, 89296, 89297, 89298, 89299, 89300, 89301, 89302, 89303, 89304, 89305, 89306, 89307, 89308, 89309, 89310, 89311, 89312, 89313, 89314, 89315, 89316, 89317, 89318, 89319, 89320, 89321, 89322, 89323, 89324, 89325, 89326, 89327, 89328, 89329, 89330, 89331, 89332, 89333, 89334, 89335, 89336, 89337, 89338, 89339, 89340, 89341, 89342, 89343, 89344, 89345, 89346, 89347, 89348, 89349, 89350, 89351, 89352, 89353, 89354, 89355, 89356, 89357, 89358, 89359, 89360, 89361, 89362, 89363, 89364, 89365, 89366, 89367, 89368, 89369, 89370, 89371, 89372, 89373, 89374, 89375, 89376, 89377, 89378, 89379, 89380, 89381, 89382, 89383, 89384, 89385, 89386, 89387, 89388, 89389, 89390, 89391, 89392, 89393, 89394, 89395, 89396, 89397, 89398, 89399, 89400, 89401, 89402, 89403, 89404, 89405, 89406, 89407, 89408, 89409, 89410, 89411, 89412, 89413, 89414, 89415, 89416, 89417, 89418, 89419, 89420, 89421, 89422, 89423, 89424, 89425, 89426, 89427, 89428, 89429, 89430, 89431, 89432, 89433, 89434, 89435, 89436, 89437, 89438, 89439, 89440, 89441, 89442, 89443, 89444, 89445, 89446, 89447, 89448, 89449, 89450, 89451, 89452, 89453, 89454, 89455, 89456, 89457, 89458, 89459, 89460, 89461, 89462, 89463, 89464, 89465, 89466, 89467, 89468, 89469, 89470, 89471, 89472, 89473, 89474, 89475, 89476, 89477, 89478, 89479, 89480, 89481, 89482, 89483, 89484, 89485, 89486, 89487, 89488, 89489, 89490, 89491, 89492, 89493, 89494, 89495, 89496, 89497, 89498, 89499, 89500, 89501, 89502, 89503, 89504, 89505, 89506, 89507, 89508, 89509, 89510, 89511, 89512, 89513, 89514, 89515, 89516, 89517, 89518, 89519, 89520, 89521, 89522, 89523, 89524, 89525, 89526, 89527, 89528, 89529, 89530, 89531, 89532, 89533, 89534, 89535, 89536, 89537, 89538, 89539, 89540, 89541, 89542, 89543, 89544, 89545, 89546, 89547, 89548, 89549, 89550, 89551, 89552, 89553,

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 > 30



# Heat Emergency Department Visits

# Emergency Department Heat Related Illness Visits by Day and Maximum/Minimum Temperature



# Discussion, Conclusion, Recommendations

# Discussion

- From 2020 through 2024, 90% of heat-associated deaths occur during summer months of June through August
  - Highest proportion in July 2024 (21 days) compared to July 2023 (17 days) at temperatures  $\geq 110^{\circ}\text{F}$ .
- ED visits also coincide with temperature increases/decreases.
- Males and individuals aged 45 to 64 years had most deaths and ED visits
- Greater than 50% of deaths involved substance use
- Individuals experiencing homelessness made up 34% of deaths
- ZIP codes with greatest percentage of heat injuries leading to death were 89101 (14.9%) ,89030 (7%), and 89121 (6.4%)

# Conclusion

- Monitoring heat-related mortality and ED visits offers valuable insight into the importance of preventative measures during the summer months and periods of high temperatures in Clark County, NV.
  - Vulnerable populations including older adults, individuals using substances, and those experiencing homelessness may experience the highest risk of heat illness, heat stroke and death.
  - By identifying the highest risk factors, along with the location of greatest occurrence, further preventative measures, such as cooling stations, can be focused on these individuals and areas.
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# Recommendations

- With 56% of heat related deaths associated with substance use, greater focus should be placed on educating the community on the effects of substances and high temperatures
- ZIP code location can assist the emergency response team with informative decision making and how they approach areas of high morbidity and mortality.
- Piloting additional cooling centers, enhancing public health outreach to high risk locations, Desert Research Institute (DRI) heat lab work group meetings, extreme heat seminar meetings, and using the Medical Reserve Core (MRC), Community Emergency Response Team (CERT) and other volunteer groups to staff cooling or mobile centers from June through August.
- Coordinate with law enforcement, the fire department, and emergency medical services to identify and assist vulnerable individuals during summer months
- This report strongly supports further efforts to reduce heat related illness and mortality, and serves as a valuable resource for the community

# Information Sharing, Coordination, and Mitigation Efforts

- Need improved Data collection to make informed decision making and evaluate mitigation strategies, Use AAR and Other Source Documents
- 2018: CASPER for Extreme Heat to gather information from public to improve emergency response plans and mitigation strategies: Shared survey with DRI for 2024-2025 Cooling Center Survey
- 2019: Southwest Practitioners Adaptation Network, Big Cities Coalition-Preparedness Directors: Share best practices
- 2022: Drought Workshop with State DPBH-THIRA and climate threats
- 2022: State of Nevada Ad Hoc Heat Preparedness working group-Information Sharing, collaboration opportunities
- 2023 Community Sustainability and Climate Action Plan Pg 35-39
  - Resilient & Healthy Community: Preparing Community for climate-driven emergencies through strengthened natural and social systems
    - Prepare for and reduce the impacts of climate hazards on Clark County Residents and visitors
    - Enhance emergency preparedness and response resources for all residents
    - Equitable access to resources and services for physical and mental health are provided to all community members
    - Natural spaces are protected, enhanced, and expanded to address the effects from a changing climate
    - 2030 and 2040 improvement metrics to measure progress
- 2023-present Heat Lab Working Group
- 2025: Extreme Heat Seminar Exercise-Southern Nevada Healthcare Preparedness Coalition
- Current Barriers and mitigation strategies: Access- Expanded Hours Cooling Stations, MRC/CERT/VOAD, transportation-Bus Passes, RTC PROTECT Grant, Tree Canopy Projects-reduce heat island etc.



# Data Sources:

Mortality and Demographics: Nevada Electronic Death Registry System (EDRS) provided by the Nevada Department of Public and Behavioral Health Office of Analytics.

Population: State Demographer Vintage 2020, 2021 and 2023 estimates, population with group quarters

Age-adjusted mortality rates are calculated per 100,000 population and include: Clark County residents, homeless individuals identified as living within Clark County or homeless individuals with an unknown or missing FIPS code.

Centers for Disease Control and Prevention (CDC). About Extreme Heat.  
[https://www.cdc.gov/disasters/extremeheat/heat\\_guide.html](https://www.cdc.gov/disasters/extremeheat/heat_guide.html). July 26th 2023.

Max/Min Temperature: National Weather Service. Past weather reported by Las Vegas WFO, NV.

Heat Associated Deaths: defined as those having an ICD-10 code of 'T67', 'X30', or identified as a heat associated death by the coroner or medical examiner in EDRS.

“Heat Caused” Deaths: Deaths in which a form of heat (ie. exposure, hyperthermia) is listed in Part I of the Cause of Death in the death certificate; either the immediate cause or part of the chain of events leading to immediate cause of death.

“Heat Related” Deaths: Deaths in which a form of heat (ie. exposure, hyperthermia) is listed in “Other Significant Conditions” or Part II of the death certificate but not listed in Part I.

Drug/Substance Use: defined as those having an ICD-10 code associated with the named drug or substance or if the substance is listed in Part I or Part II of the Cause of Death for those pending ICD-10 assignment.

Methamphetamine was identified using ICD-10 T43.6 and ‘Methamphetamine’ listed in Part I or Part II of the Cause of Death.

Homelessness: Data is provided by Clark County Office of the Coroner/Medical Examiner (CCCOME). The events not determined as homeless by the coroners office, but had an unknown home address in EDRS, were labeled as “unknown”.



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