



4.2 HAZARD IDENTIFICATION

This section summarizes previous disaster declarations and identifies the hazards of concern for Chester County.

4.2.1 Disaster Declarations

In reviewing and updating Chester County’s hazards of concern, the Steering Committee and Planning Team reviewed additional information and historical records from a wide range of sources. This section discusses the Presidential Disaster and Emergency Declarations, Gubernatorial Disaster Declarations or Proclamations, and Small Business Administration Disaster Declarations on record that have affected Chester County.

Presidential Disaster and Emergency Declarations are issued when it has been determined that state and local governments need assistance in responding to a disaster event. Since 1955, declarations have been issued for various hazard events, including hurricanes or tropical storms, severe winter storms, and flooding. A unique Presidential Emergency Declaration, Emergency Declaration 3235, was issued in September 2005. Through this declaration, President George W. Bush declared a state of emergency for the Commonwealth of Pennsylvania and ordered federal aid to supplement Commonwealth and local response efforts to help people evacuate from their homes due to Hurricane Katrina, though the Commonwealth was not directly impacted by Hurricane Katrina. A summary of declarations affecting the County is provided in the tables below.

Table 4.2-1 lists Presidential Disaster and Emergency Declarations issued from 1972 through March 2020 that have affected Chester County.

Table 4.2-1. Presidential Disaster and Emergency Declarations Affecting Chester County

Declaration Number	Date	Event
DR-4506	March 2020	Coronavirus (COVID-19) Pandemic
EM-3441	March 2020	COVID-19
DR-4267	March 2016	Severe Winter Storm and Snowstorm
EM-3367	February 2014	Severe Winter Storm
EM-3356	October 2012	Hurricane Sandy
DR-4030	September 2011	Tropical Storm Lee
EM-3340	September 2011	Remnants of Tropical Storm Lee
DR-4025	September 2011	Hurricane Irene
EM-3339	August 2011	Hurricane Irene
DR-1898	April 2010	Severe Winter Storms and Snowstorms
DR-1649	June 2006	Severe Storms, Flooding, and Mudslides
EM-3235	September 2005	Hurricane Katrina Evacuation
DR-1557	September 2004	Tropical Depression Ivan
DR-1497	September 2003	Tropical Storms Henri and Isabel, and Related Severe Storms and Flooding
EM-3180	March 2003	Snowstorm
DR-1294	September 1999	Hurricane Floyd
DR-1093	January 1996	Flooding
DR-1085	January 1996	Blizzard



Declaration Number	Date	Event
DR-1015	March 1994	Winter Storm, Severe Storm
EM-3105	March 1993	Severe Snowfall and Winter Storm
DR-400	July 1973	Severe Storms, Flooding
DR-340	June 1972	Tropical Storm Agnes

In addition to these Presidentially-declared events, 33 events warranted Gubernatorial Disaster Declarations or Proclamations that included Chester County, as shown in Table 4.2-2 (Pennsylvania Emergency Management Agency [PEMA] 2020).

Table 4.2-2. Gubernatorial Disaster Declarations or Proclamations Affecting Chester County

Date	Event
March 2020	Emergency Disaster Declaration – Coronavirus (COVID-19)
January 2019	Proclamation of Disaster Emergency – Severe Winter Event
August 2018	Proclamation of Disaster Emergency – Severe Weather Event
June 2018	Proclamation of Disaster Emergency – Severe Weather Event
January 2018	Proclamation of Disaster Emergency – Opioid Crisis
March 2017	Proclamation of Emergency – Severe Winter Storm
January 2016	Proclamation of Disaster Emergency – Severe Winter Weather
August 2015	Proclamation of Disaster Emergency – Severe Storms
January 2015	Proclamation of Disaster Emergency – Severe Winter Weather
February 2014	Proclamation of Emergency – Severe Winter Weather
January 2014	Proclamation of Emergency – Regulations – Severe Cold
June 2013	Proclamation of Emergency – High Winds, Thunderstorms, Heavy Rain, Tornado, Flooding
October 2012	Proclamation of Emergency – Hurricane Sandy
April 2012	Proclamation of Emergency – Spring Winter Storms
August 2011	Proclamation of Emergency - Severe Storms and Flooding (Lee/Irene)
January 2011	Proclamation of Emergency – Severe Winter Storm
February 2010	Proclamation of Emergency – Severe Winter Storm
April 2007	Proclamation of Emergency – Severe Winter Storm
February 2007	Proclamation of Emergency – Severe Winter Storm
February 2007	Proclamation of Emergency – Regulations
September 2006	Proclamation of Emergency – Tropical Depression Ernesto
September 2005	Proclamation of Emergency – Hurricane Katrina
February 2002	Drought and Water Shortage
July 1999	Drought
April 1997	Snowstorm
September 1995	Drought
January 1988	Oil Spill
November 1980	Drought Emergency
February 1978	Blizzard



Date	Event
January 1978	Heavy Snow
February 1974	Truckers' Strike
February 1972	Heavy Snow
January 1966	Heavy Snow

Chester County has also received Small Business Administration Disaster Assistance for a number of disaster events. A Small Business Administration Disaster Declaration qualifies communities for affordable, timely, and accessible financial assistance. Table 4.2-3 lists Small Business Administration Disaster Declarations issued for Chester County from 1989 through July 2019 (PEMA 2020), in addition those declarations for which Chester County was included as an adjacent county.

Table 4.2-3. Small Business Administration Disaster Declarations Affecting Chester County

Date	Event
July 2019	Flash Flooding
February 2014	Economic Injury
April 2012	Agricultural Disaster
August 2009	Flooding
January 2009	Coatesville Arson Fires
November 2007	Fires
May 2001	Fires
August 1992	Fire
July 1989	Flooding
February 1989	Fire

4.2.2 Summary of Hazards

As part of the plan update process, the Steering Committee and Planning Team reviewed the hazards of concern detailed in the 2015 version of the plan as well as those identified in the State Hazard Mitigation Plan (HMP). They also considered the history of hazard events occurring in Chester County as well as events occurring after the completion of the 2015 version of the plan. This review of historical events included an evaluation of all emergency and disaster declarations in the Commonwealth, with a focus on those in which Chester County was designated for federal assistance.

Further, all jurisdictions participating in the plan update process were provided a *Hazard Identification/Evaluation of Risk* worksheet to help identify the hazards—natural and non-natural—that each community believed posed significant risk to Chester County, including any that may not have been considered in either the 2015 version of the plan or the State HMP. Completed worksheets submitted by the municipalities are included in Appendix D. Following the review of the 2015 hazards list and completion of the *Hazard Identification/Evaluation of Risk* worksheet, additional hazards were considered in need of a risk assessment. The Steering Committee and Planning Team decided to remove Civil Disturbance hazard that was addressed in the 2015 version of the HMP. Thunderstorms were incorporated into the Tornado and Windstorm hazard profile. Armed Attacks, Conventional/Improvised Bombs, and Cyber Terrorism were incorporated into the Terrorism profile.



Based on all available information and input from the municipalities, the Steering Committee and Planning Team selected the following natural and non-natural hazards for consideration in this plan:

Natural Hazards

- Drought/Water Supply Deficiencies
- Earthquake
- Extreme Temperatures
- Flood, Flash Flood, Ice Jams
- Hurricanes and Tropical Storms
- Invasive Species
- Pandemic
- Radon Exposure
- Tornado and Windstorm
- Winter Storm

Non-Natural Hazards

- Dam Failure
- Environmental Hazards
- Nuclear Incident
- Opioid Epidemic
- Pipeline Incidents
- Structural Fires
- Terrorism
- Transportation Accidents
- Utility Failure

These hazards have been profiled individually in Section 4.3 of this plan.