

The following analysis is from our report on structure fires in educational properties. We are unable to provide an electronic version of the published incident descriptions. Please contact Nancy Schwartz at 617-984-7450 or e-mail osds@nfpa.org if you are interested in ordering a hard copy of the report.

STRUCTURE FIRES IN EDUCATIONAL PROPERTIES

**Kimberly D. Rohr
Fire Analysis and Research Division
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471**

November 2004

Copyright©, 2004, National Fire Protection Association, Quincy, MA 02169-7471

Executive Summary

During 2001, an estimated 7,100 reported fires in educational properties caused 76 civilian injuries and \$127.7 million in estimated direct property damage. Educational properties include: public, private and parochial schools from preschool through high school where students attend during the day only; daycare facilities; public, private or parochial boarding schools; trade or business schools; and colleges or universities. Dormitories are considered residential and therefore are not included in this report.

Fires in the educational occupancy group fell 53% from 15,100 in 1980 to 7,100 in 2001. In comparison, structure fires of all types declined 48% from 1980 to 2001. From 2000 to 2001, fires in these occupancies increased slightly by less than 1%.

During the three-year period of 1999-2001:

- Educational property structure fires started in a wide variety of areas. During this time period, the leading area of origin was the lavatory or locker room, with 23% of the incidents. Another 13% of the fires started in the kitchen. Seven percent started in classrooms or assembly area for less than 100 people. Another 7% started in the corridor or hallway.
- Forty-six percent of the fires in educational properties were intentionally set. Cooking causes was involved in another 13% of fires in these properties during the same period. The third most common cause was electrical distribution equipment with 8%.
- Fires in educational facilities peaked in March with 11% but are fairly evenly distributed from January through May. The smallest shares of fires occurred in July. August was a close second.

Table of Contents

| | |
|---|-----|
| Executive Summary | i |
| Table of Contents | ii |
| List of Tables and Figures | iii |
| Structure Fires in Educational Facilities | 1 |

Appendix

- A. How National Estimates Statistics Are Calculated
- B. General Comments on Fire Causes in Structure Fires
- C: Educational Structure Fire NFPA Fire Investigation Summaries
- D: Educational Structure Fire Articles Previously Published in *NFPA Journal*
- E: Educational Structure Fires Previously Published in *NFPA Journal's* "Firewatch" Series and Summaries Previously Published in NFPA's Catastrophic and Large-Loss Studies

List of Tables and Figures

| | |
|---|----|
| Table A. Fires in Educational Properties, by Property Type | 1 |
| Table 1. Educational Structure Fires, by Year Reported | 4 |
| Table 2. Educational Fires, by Cause | 5 |
| Table 3. High School, Junior High and Middle School Fires, by Cause | 6 |
| Table 4. Elementary, Including Kindergarten Fires, by Cause | 7 |
| Table 5. Adult Education Center and College Classroom Fires, by Cause | 8 |
| Table 6. Unclassified Non-Adult School Fires, by Cause | 11 |
| Table 7. Daycare Fires, by Cause | 10 |
| Table 8. Preschool Fires, by Cause | 9 |
| Table 9. Educational Fires Not Classified Elsewhere, by Cause | 12 |
| Table 10. Educational Structure Fires, by Time of Day | 13 |
| Table 11. Educational Structure Fires, by Day of Week | 14 |
| Table 12. Educational Structure Fires, by Month of Year | 15 |
| Table 13. Educational Structure Fires, by Area of Origin | 16 |
| Table 14. Educational Structure Fires, by Area of Origin and Item Ignited | 17 |
| Table 15. Fatal Educational Facility Fires Listing | 18 |