NFPA's Survey and How It Relates to NFIRS

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To Be Covered

- What is NFPA's survey?
- What does it do that NFIRS doesn't?
- What does NFIRS do that the survey doesn't?
- How are national estimates calculated for specific fire problems?
- Upcoming changes to the survey
- Common questions
- A bit about NFPA statistics

What is the NFPA Survey?

- Based on a statistical sample
 - All local departments protecting populations of at least 50,000
 - Random sample, stratified by population, of small and medium communities
- Collects fire department experience data for past year
- Summary data only





Survey Contents

- Fire department characteristics
- Responses by broad incident type
 - Greater detail on false alarms
- Fires, civilian deaths and injuries, direct property damage by broad incident type
 - Structure fires by broad property type
- Firefighter injuries by duty
 - Firefighter fireground injuries by cause
- Fire department vehicle accidents
- Major fires

What Does the Survey Do that NFIRS Doesn't?



- Projections are possible because of the statistical sample
 - Same rules throughout the country
 - In NFIRS, different states have different reporting requirements
- Previous year's analysis is complete by late summer or early fall



What Does NFIRS Do that the Survey Doesn't?

- Lots!
 - More detail
 - Incident based system can answer more questions
 - Can compare different jurisdictions if they follow the same reporting policies and practices

How a Fire Gets Counted



Fire dept. called

Report done

Report to state

Released or sent to USFA
- In NFIRS



Report not done

Not sent to state or server

Not sent to USFA Not in NFIRS

Handled privately

Not included in statistics

Not included in NFIRS -May be captured by NFPA survey

Not included in statistics

NEPA*

What Do the Survey and NFIRS Have in Common?

- Both use NFIRS codes
- Fire departments fill out both
- Data quality can be an issue
 - NFPA follows up on vehicle fire deaths



How Are National Estimates Calculated?

- NFIRS provides the details, but not the whole universe of reported fires
- NFPA survey is sample-based, so projections can be made about total
 - Lacks detail
- Combine the two to develop scaling ratios





National Estimates Calculations

Projected totals from NFPA survey

NFIRS totals

- Different scaling ratios for
 - Residential structures, non-residential structures, vehicles, and outside and other
 - Fires, deaths, injuries, and property damage

Upcoming Changes to Survey



- CPSC wanted survey information on confined fires
- 2007 survey asks about the number of
 - Confined and non-confined
 - Residential and all structure fires
- Mutual aid is restricted to mutual aid given
- Some departments will not be able to answer these questions the first year

Common Questions about the Survey

Why didn't we get one this year?



- Random sample for smaller departments
- Can only accept surveys from departments in the sample
- Sample varies by year
 - Department is likely to be in sample in some future years

Can I get a copy of the survey?



- Blank copies
 - Yes
- For your own fire department
 - Yes, if we have it
- For other fire departments
 - No

Can I get fire statistics by state?



- For unintentional injury fire deaths
 - Yes
 - Death certificate data used, not NFPA survey
- For fires
 - No
 - Inconsistent reporting practices
 - NFPA survey is a national sample

twice if it is in NFIRS and the No survey?

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- Survey projections are calculated independently of NFIRS
- If all incidents captured in the survey were in NFIRS, the scaling ratio should be 1

major fire is in the survey but not

- Incident will usually be included in the general scaling ratios
 - September 11 and some wildland fires were not
- Details of fire will not be in NFIRS
 - Station Nightclub fire increased the non-residential fire death ratio



estimates when you know about a fire not in

- National estimates are projections
- Inclusion or exclusion of serious fires will make big difference when scaled up
- We footnote rather than adjust
- Adjustments will always be incomplete



NFPA Statistics

- CD of our reports in packet
 - Also brief statistical fact sheets
- Sign up for quarterly CDs and/or emailed reports
- Reports are copyrighted
 - Links are welcome
 - We will send reports to fire service for free



More on NFPA Statistics

- NFIRS used in almost all
 - Thank you for making it possible
- With lead time, we can do custom work
 - Fee may be waived if it contributes to NFPA's mission
- Help us get the statistics to people who provide the data



In Summary

- NFPA survey and NFIRS are complementary
- Both are used for national estimates
- Thank you for helping us understand the fire problem