



FISC Bulletin Board

IAAI Fire Investigation Standards Committee (FISC)

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NFPA 921 in Court—By The Numbers

1. INTRODUCTION

Questions frequently arise about the extent to which *NFPA 921 Guide for Fire and Explosion Investigations (NFPA 921)* is being recognized by the courts as authoritative and which courts have cited *NFPA 921*. In response to these inquiries, this column summarizes our twenty years of research into the use of *NFPA 921* in court. It addresses statistics in three interesting areas:

- a) The numbers of cases (primarily from the United States and Canada) that have specifically referenced *NFPA 921* in the reasons for their decisions;
- b) The jurisdictions in which *NFPA 921* has been referenced, and;
- c) The categories of issues in which *NFPA 921* has been raised.

Also addressed are the limitations of legal research, pointing to the likelihood that *NFPA 921* has been and is being used in thousands of legal cases around the world, even though it is impossible to accurately access all of the cases or quantify these numbers.

2. RESEARCH PARAMETERS

In 1994, we began to track the use of *NFPA 921* in courts. We have consistently accessed numerous paid subscription and free legal services that maintain databases of case decisions. In more recent years, we have also conducted extensive Internet research, as the wealth of information available through the Internet has grown exponentially over time.

Case Decisions: We have searched electronically and in print case reporting services for case decisions from all 50 states of the United States and all 13 jurisdictions in Canada. We also searched databases for cases from the common law countries of England, Australia, and New Zealand and from the civil

law country of Mexico. Some cases where a written decision was filed but not picked up by the legal services and are therefore not available through these databases have been submitted to us by members of the fire investigation community—experts or attorneys—who have personal knowledge of a particular case.

Expert Materials and Legal Briefs: In recent years, American databases have started collecting court documents and transcripts filed in civil and criminal litigation, such as expert witness reports and transcripts of testimony, as well as legal briefs in support of motions or appeals. While only a very limited number of such documents are accessible through our research tools, we have canvassed such material looking for the extent to which *NFPA 921* is quoted.

Our research returned approximately 270 case decisions from the United States, 49 from Canada, one from Australia, and one from New Zealand referring to *NFPA 921*. This is a phenomenal number of cases citing a document that in legal terms amounts to merely an authoritative treatise or industry standard.

To appreciate the implications of these numbers, first we analyze the spread of the use of *NFPA 921* over time. Second, we have created a geographical analysis by mapping out the jurisdictions where these cases were found. Third, we summarize the various contexts in which *NFPA 921* is referenced. Finally, we explain the deductions that can be drawn by putting these numbers in perspective given the limitations of this type of legal research.

3. STATISTICS & TIMELINE ANALYSIS

Following is an overview of the growth of court cases making specific mention of *NFPA 921* over time. Key events that have impacted the use of *NFPA 921* in court are included in this table. (see page 22 for table)

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4. GEOGRAPHICAL ANALYSIS

As the old adage goes, a picture is worth a thousand words. Below are two snapshots in time from each the United States and from Canada offering an interesting representation of the spread of *NFPA 921* cases across the United States and Canada. We selected the year 2005 to take our first snapshot of the incidence of *NFPA 921* cases. 2005 is roughly the half-way point between when *NFPA 921* was first published in 1992 and our most recent research conducted in December 2014. Our maps show the jurisdictions where *NFPA 921* cases had been decided by 2005 in both Canada and the United States. For comparison sake, the next snapshots show the jurisdictions where *NFPA 921* cases have been decided as of early December, 2014.

Note that in our Canada map there is no mention of federal jurisdiction decisions. The Canadian court system differs from that in the United States. In Canada, the federal courts have a very limited jurisdiction and it is very unlikely that they would hear cases where *NFPA 921* would be relevant. Therefore, all of the Canadian cases are from provincial courts.

In the maps showing United States jurisdictions, rectangles indicate jurisdictions where federal cases have mentioned *NFPA 921* and circles indicate which states have cases referring to *NFPA 921*.

Not shown on these maps are the Australian *NFPA 921* decision published in 2012 and the New Zealand decision published in 2014.

In closing, it is safe to say that *NFPA 921* is being considered by courts across both the United States and Canada. The numbers of such cases is clearly increasing with the passage of time, as are the numbers of jurisdictions where courts feel that a reference to *NFPA 921* is significant enough to mention in the reasons for their decisions. When one compares the mention of *NFPA 921* with references by courts of other authoritative treatises or industry standards in the fire investigation field, *NFPA 921* is receiving significantly more attention by the courts than comparable publications.

5. CONTEXTS FOR USE OF *NFPA 921* IN COURT

While this column does not afford us the space to provide a detailed analysis of the ways in which *NFPA 921* arises in court decisions, here are some of the contexts for how it is being used in court:

DATE	EVENT
1992	Publication of <i>NFPA 921 Guide for Fire and Explosion Investigations</i> : first (1992) edition.
1993	<i>Daubert v. Merrell Dow Pharmaceuticals, Inc.</i> : ¹ United States Supreme Court (“USSC”) overrules <i>Frye</i> and interprets FRE 702. The trial judge is a gatekeeper to ensure scientific expert evidence is admitted only if A) the expert is qualified, B) the expert evidence is relevant and fits the case, and; C) the expert evidence is reliable, measured by 5 non-definitive tests of 1) testing, 2) peer review and publication, 3) standards, 4) general acceptance, and 5) error rate.
1993	First Canadian court decision that specifically mentions <i>NFPA 921</i> .
1995	<i>NFPA</i> publishes the 1995 Edition of <i>NFPA 921</i> .
1995	U.S. Dept. of Justice, Federal Bureau of Investigation hosts an international symposium on arson investigations, including a paper and lecture on the impact of <i>NFPA 921</i> in the courtroom. ² Note that at this point in time, <i>NFPA 921</i> had rarely been used in court, at least insofar as the case decisions reflect.
1995	By 1995 one American criminal case, one American decision of an administrative tribunal, and two Canadian cases mentioned <i>NFPA 921</i> , bringing the grand total across both countries to four.
1996	Fire investigations are brought under <i>Daubert</i> scrutiny in <i>Michigan Millers Mutual Ins. Corp. v. Benfield</i> , ³ which demonstrates how <i>NFPA 921</i> can be an effective tool in cross-examination to have a fire investigation expert’s testimony excluded under <i>Daubert</i> . The 11 th Circuit upheld this decision on appeal. ⁴ This case signals an eventual onslaught of <i>Daubert</i> challenges to fire investigation experts.
1996-1997	The International Association of Arson Investigators and the National Fire Protection Association co-sponsor a series of regional seminars across the United States entitled <i>NFPA 921: Sword and Shield</i> , to introduce fire investigators to the various ways that <i>NFPA 921</i> can be used in court.
1998	<i>NFPA</i> publishes the 1998 Edition of <i>NFPA 921</i> .
1999	<i>Kumho Tire Co., Ltd. v. Carmichael</i> : ⁵ USSC holds that <i>Daubert</i> reliability tests apply to technical as well as scientific knowledge. Any dispute as to whether <i>Daubert</i> reliability tests apply to experts in fire investigations is now over— <i>Daubert</i> applies to fire investigators.
2001	<i>NFPA</i> publishes the 2001 Edition of <i>NFPA 921</i> .
2004	<i>NFPA</i> publishes the 2004 Edition of <i>NFPA 921</i> .
2005	Research reveals a total of 47 cases from the US and Canada. Six of the state cases were from courts of appeal and one was from a state supreme court. In the US federal courts, cases included decisions of the 8 th Circuit, 10 th Circuit, and 11 th Circuit.
2007	In December 2007, the <i>NFPA</i> publishes the 2008 Edition of <i>NFPA 921</i> .
2009	Our research identified approximately 100 <i>NFPA 921</i> cases from State and Federal jurisdictions in the US, and 16 from Canada.
2010	By 2010 in the U.S., more than 135 written decisions from both state and federal jurisdictions specifically mention <i>NFPA 921</i> . Of these, more than 20 are from state and federal appellate courts and 2 are from state supreme courts. In the federal courts, cases include decisions of the 2 nd , 4 th , 6 th , 7 th , 8 th , 10 th , & 11 th circuits. Most of the decisions are the result of <i>Daubert</i> motions. Measuring the reliability of an expert’s evidence by measuring it against <i>NFPA 921</i> ’s recommendations has become common. In jurisdictions that use <i>Frye</i> to determine the admissibility of expert testimony, <i>NFPA 921</i> is used as an indicator of general acceptance.
2010	Citing the <i>NFPA 921</i> and the National Academy of Science’s report, <i>Strengthening Forensic Science in the United States: A Path Forward</i> ⁶ (which also cites <i>NFPA 921</i>), a federal district court judge reviews the standard of care for reasonable trial counsel in criminal arson cases and finds that counsel should be familiar with problems in cause and origin investigation techniques and forensic sciences. ⁷ Although this case is not binding authority, it represents a major shift—from earlier cases using <i>NFPA 921</i> in the context of considering the standard of care for experts, to considering the standard of care for trial counsel in light of the problems in origin and cause investigation revealed by <i>NFPA 921</i> .
2010	In December 2010, the <i>NFPA</i> publishes the 2011 Edition of <i>NFPA 921</i> .
2012	Approximately 200 American cases, 30 Canadian cases, and one Australian case specifically mention <i>NFPA 921</i> .
2013	In December 2013, the <i>NFPA</i> publishes the 2014 Edition of <i>NFPA 921</i> .
2014	<i>NFPA 921</i> decisions are on the rise. Our research returned 270 case decisions from the United States, 49 from Canada, one from Australia, and one from New Zealand.

NFPA 921 CASES FROM THE USA—2005



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The above map represents about 30 state and federal cases decided in the United States by 2005.

NFPA 921 CASES FROM THE USA—2014



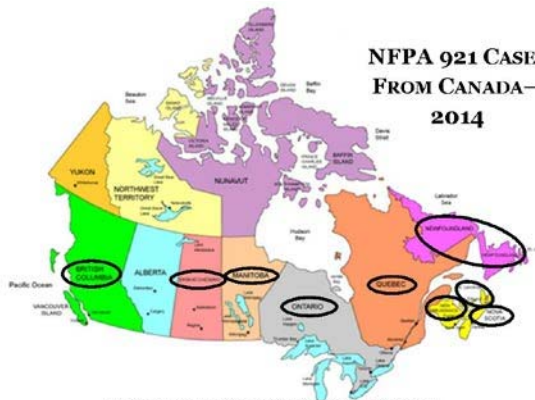
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The above map represents about 270 state and federal cases decided in the United States by 2014.

NFPA 921 CASES FROM CANADA—2005



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The above map represents about 17 provincial court cases decided in Canada by 2005.

NFPA 921 CASES FROM CANADA—2014



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The above map represents about 49 provincial court cases decided in Canada by 2014.

- *NFPA 921* is referenced in both civil and criminal cases in Canada and the United States.
- In criminal cases, a common issue involving *NFPA 921* is the admissibility or relevance of canine alerts. Burn pattern analysis is another big issue.
- In the United States, a growing body of post-conviction relief cases is framed around the changing science of fire investigations publicized by *NFPA 921*.
- The majority of American federal decisions and a significant number of state decisions revolve around the qualifications of experts or the reliability of expert testimony (*i.e. Daubert or Fry challenges, or the state equivalents*).

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- In civil cases, *NFPA 921* is used in a variety of different types of actions, including:
 - Civil trials or appeals raising arson as a defense in an insurance claim or a bad faith allegation by an insured party;
 - Product liability cases;
 - Breach of contract or breach of warranty cases;
 - Tort cases, particularly negligence.
- Among the most popular issues for which *NFPA 921* is cited are:
 - Spoliation of evidence;
 - Testing or lack of testing (experimental testing vs. thought experiments);
 - Scientific method (as compared to the methodology used by investigators in particular cases);
 - Sufficiency of data collected or documented by an investigator as compared to data *NFPA 921* suggests is relevant;
 - Peer review;
 - Burn pattern interpretation;
 - Area of origin or cause determination;
 - Process of elimination or “negative corpus.”
- *NFPA 921* is a common tool used by experts in supporting their conclusions or evidence in expert reports, affidavits, and direct examination at trial.
- *NFPA 921* is also a common tool used to challenge experts' conclusions or evidence in the reports or affidavits of opposing experts, and in cross-examination at trial.

6. LIMITATIONS OF LEGAL RESEARCH

In considering the implications of our research results, the limitations of legal research are significant and are critical to understanding the implications of our findings.

6.1. Limitations of Electronic Databases & Search Engines

Legal research, even in the digital age, discloses only a small fraction of cases in which *NFPA 921* is used. Here are some of the reasons why:

- Our research uncovers only written decisions. Yet the vast majority of legal cases generate no written decisions. For example:
 - Actions that settle before an action is filed generate no written decisions;
 - Actions that settle before a *Daubert* motion is decided generate no written decisions;
 - Actions that settle before trial generate no written decisions, and;
 - The majority of civil and criminal cases do not go to trial (it is estimated that only 3-4% go to trial).
- Due to the very limited number of court documents such as expert reports or legal briefs that historically have been posted on the Internet or picked up by legal subscription services, our research has been largely confined to written court decisions. This means that to the extent that *NFPA 921* has been cited by experts in their reports, depositions (known as “discoveries” in Canada), or trial testimony, or by lawyers in their briefs and legal arguments in court cases around the world, our research would not reflect these numbers.
- Our research has until recently been restricted to the United States and Canada because of the limited size of or access to international legal databases.

→ Electronic research, even full text searches are not infallible. For example, a search for the “National Fire Protection Association” will not return a case where the court erroneously called it the “National Fire Prevention Association.”

6.2. Civil Law vs. Common Law Court Decisions

There is a fundamental difference in the way court decisions are rendered in common law countries when compared to countries following the civil law tradition. Common law countries include England, the United States, Canada, Australia, and New Zealand. Civil law countries include Mexico, most of Europe, and most of South America.

In civil law countries, there are few court cases that are written and reported, especially from the lower courts. To the extent judges render a written decision, that decision typically reports which party wins and which party loses the case, without giving the reasons for the decision. This means that even if *NFPA 921* influenced the court’s decision, there would be no mention of *NFPA 921* because the outcome of the case is reported, not the reasons for that outcome. Therefore, there is a very slim chance that even with the most exhaustive research we would find cases from civil law countries mentioning *NFPA 921*.

Anecdotally, we know from speaking to American experts who have participated in litigation in Mexico that they have used *NFPA 921* in their expert reports. However, we have no means of reasonably tracking the extent to which experts or lawyers (sometimes called advocates) in civil law countries rely on *NFPA 921* in court cases. This is because we do not have access to search court records in civil law countries for documents such as expert witness reports that might mention *NFPA 921*. Further, it would be extremely rare to find reference of a document such as *NFPA 921* in a court decision from a civil law country for the reasons described above.

By contrast, in a common law country, if a judge decides to render a written decision in a case, the decision typically includes the reasons for that decision. So, to the extent that *NFPA 921* plays a significant role in the evidence or in the legal argument influencing the court’s decision, a judge might decide to specifically reference *NFPA 921*. Therefore, the chances of us locating cases citing *NFPA 921* is much more likely in common law countries than it is in civil law countries.

Unfortunately, even in common law countries there are noteworthy limits on our ability to accurately determine the extent to which *NFPA 921* is being used in courts:

- a) First, it is not often that courts prepare written reasons for their decisions on motions.
- b) Second, even when the court does render a written decision with reasons, not all such

decisions are picked up by legal subscription services, nor become available on the Internet.

- c) Third, if a matter goes to trial and is heard by a judge and jury, the jury typically makes the decision but juries do not write reasons for their decisions. Therefore a judgment is rendered without written reasons.
- d) Finally, if a trial is heard by a judge sitting alone (a bench trial), the judge is not required to provide written reasons for his or her judgment. And, once again, even if written reasons are rendered they may not become available to us through either legal subscription services or the Internet. The same is true of appeal decisions.

6.3. Conclusion

Our research is very extensive, covering numerous jurisdictions over several countries. However, due to the limitations of online legal research, the statistics outlined in this article represent but a small number of civil and criminal cases in which *NFPA 921* plays a significant role.

7. FINAL WORDS

Our sense in having following the growth of the body of cases referring to *NFPA 921* over a period of two decades is that our research just reveals the tip of the iceberg. For example, though we found 270 American cases, in one database alone over 5,000 expert materials (reports and testimony), court documents, and legal briefs specifically cite *NFPA 921*. At this stage of the transition by American courts to electronic filings, this represents only a small percentage of case filings that we can currently access.

Also consider that with each edition, *NFPA 921* grows larger, addressing more issues, potentially impacting more future cases. Given the lag time before the issuance of a new edition of *NFPA 921* and its adoption by the fire investigation and legal communities, we expect that the impact of the 2011 and 2014 editions have yet to be fully appreciated.

Finally, it appears that the number of *NFPA 921* cases is growing over time. With each passing year more such cases are turning up in legal databases, with no end in sight. This trend is being accentuated by the number of legal treatises that are now paying tribute to the importance of *NFPA 921* in civil and criminal fire litigation, and to the reference to *NFPA 921* in the *NAS Report*. In the meantime, we will continue to track this interesting field of research and report our results.

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