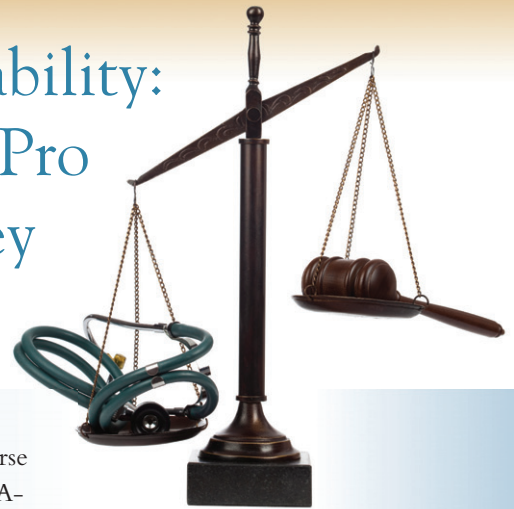


# Nurse Practitioner Professional Liability: A Synopsis of the CNA HealthPro Claims Study and NSO Survey

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## ABSTRACT

This article presents highlights of a study authored by two major providers of nurse practitioner (NP) professional liability insurance. CNA HealthPro described CNA-insured NP liability claims between 1998–2008. Nurses Service Organization (NSO) surveyed its insured APNs (95% NPs) to compare APNs with and without claims on a variety of factors. An increase in ultimate average indemnity and expense payments for NPs was identified, and strategies to mitigate risk were suggested. The NSO survey response rate was 12.8% (n = 3,037) and included 287 APNs reporting a claim within 5 years and 2,750 non-claim responses. APNs with claims were more likely than non-claim APNs to respond that their state regulations require direct physician supervision. As NPs continue to occupy a central role in healthcare, it is important to explore NP liability claims in order to develop useful risk-management strategies.

**Keywords:** nurse practitioner liability, nurse practitioner malpractice, nurse practitioner negligence, risk management

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CNA and Nurses Service Organization (NSO) recently published the report “Understanding Nurse Practitioner Liability: CNA HealthPro Nurse Practitioner Claims Analysis 1998–2008, Risk Management Strategies and Highlights of the 2009 NSO Survey,” which presents the current legal and regulatory environment, an analysis of professional liability claims, and risk-related management strategies. The claims analysis includes events that occurred between 1998 and 2008 and involved CNA-insured nurse practitioners (NPs).

Readers should note that the CNA HealthPro claims review and the NSO survey exclude claims associated with registered nurses, certified registered nurse anesthetists, and certified nurse midwives. *Nurse practitioner*, as defined here, includes clinical nurse specialists, except where clinical nurse specialists are cited separately. To enhance the discussion, NSO surveyed NPs insured through their program regarding the relationship between liability and a variety of demographic and professional factors.

This article is a synopsis of the claims study and survey. The full document is available upon request to CNA or NSO and is online at <http://www.cna.com/portal/site/cna/riskcontrol>. The complete NSO survey can be

accessed at [www.nso.com/NPclaimstudy2009](http://www.nso.com/NPclaimstudy2009). See [Table 1](#) for a list of CNA/NSO publication titles to date regarding nurse practitioner liability.

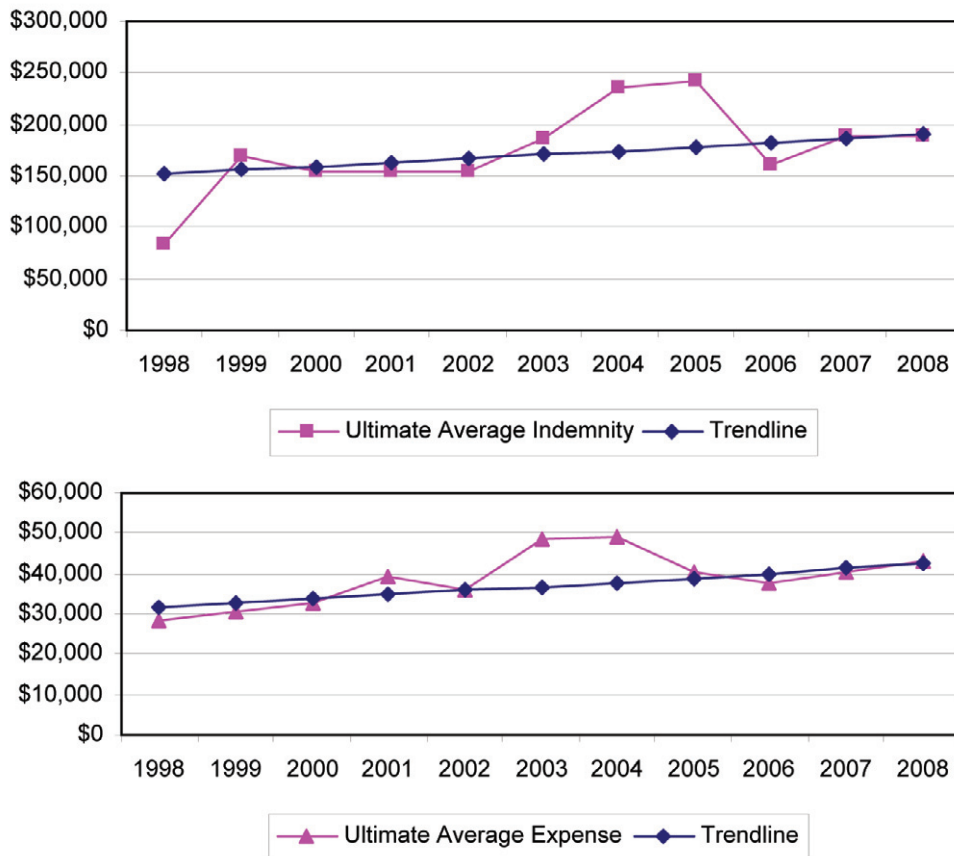
## HIGHLIGHTS FROM THE CNA HEALTHPRO CLAIMS ANALYSIS

The analysis includes claims brought against CNA-insured NPs for events that occurred between January 1, 1998, and December 31, 2008. During this period, 1,799 claims were reported, of which 707 open and closed claims met the criteria for inclusion. In the following data analysis, *frequency* refers to the number of open and closed claims with the specified attribute, such as an allegation, location, or specialty. *Indemnity payments* are monies paid in the settlement or judgment of a claim by CNA. *Expenses* are monies paid by CNA in the investigation, management, or defense of a claim. *Severity* refers to the average paid indemnity for the group of closed claims that included indemnity payments.

These inherent data limitations should be noted:

- The database includes only CNA-insured NPs, which may not represent the entire population of NPs.

**Figure 1.** Ultimate average indemnity by accident year (top) and ultimate average expense by accident year (bottom).



- Indemnity and expense payments include only monies paid by CNA on behalf of its insured NPs. Other possible sources of payment related to a claim, such as employer-based coverage, are not included.
- While indemnity payments generally reflect the professional liability insurance policy coverage limits of \$1 million, judgments against another defendant may be higher.
- Coverage for indemnity payments is generally limited by the policy to \$1 million, whereas judgments against a defendant may be higher.

Major findings for each factor reviewed in the study are summarized below, along with selected charts.

#### Ultimate Severity of Claims by Accident Year

Figure 1, which is based on data extracted from the actuarial review (Figures 1a and 1b in that review), provides the best estimates of claim severity over time. The data indicate that ultimate average indemnity and expense payments have increased over the past 10 years. (*Accident year* refers to the year the event occurred.)

#### Claims by Clinical Specialty

Adult/geriatric medicine and family and pediatric/neonatal medicine continue to have the most claims in the database. These specialties account for 84.3% of CNA open and closed claims. The pediatric/neonatal specialty has the highest average severity. Although these claims are only 4.7% of the closed claims, their average paid indemnity was \$318,150.

#### Claims by Location

Medical care offices experience the highest number of open and closed claims. The highest severity closed claims occur at freestanding urgent care centers (based on a small sample) and from inpatient hospital services.

#### Claims by Injury

Wrongful death is the injury alleged in 40.5% of open and closed claims (Figure 2). An infection, abscess, or sepsis is the injury most frequently related to a death. Cardiac condition is associated with 22.1% of the closed claims that resulted in death. Categories of injuries with

**Table 1. CNA/NSO NP Liability Claims Review and Survey Publications**

Title	Description
CNA's Nurse Practitioner Claims Study (1994-2004)	CNA/NSO releases first ever NP liability claims analysis. Analyzed 10 years of claims brought against NPs in the CNA HealthPro-NSO program
Understanding Nurse Practitioner Liability: CNA HealthPro Nurse Practitioner Claims Analysis 1998-2008. Risk Management Strategies and Highlights of the 2009 NSO Survey	CNA's 10-year claims analysis of CNA-insured NPs and highlights of NSO's survey of NSO-insured NPs
NSO 2009 Advanced Practice Nurses Survey (Kretschman Research Consulting)	Full report of NSO's survey of CNA/NSO-insured NPs. Includes statistical methodology.

Available at <http://www.nso.com/nursing-resources/claim-studies.jsp>

an average paid indemnity over \$150,000 (in closed claims) are presented in Table 2.

### Claims by Disability

The categories of disability in the study are death, permanent partial disability, temporary partial disability, permanent total disability, temporary total disability, outcome not available, and no disability. Death is the category with the highest percentage of open and closed claims. Three categories—permanent total disability, death, and permanent partial disability—incurred an average indemnity payment over \$180,000.

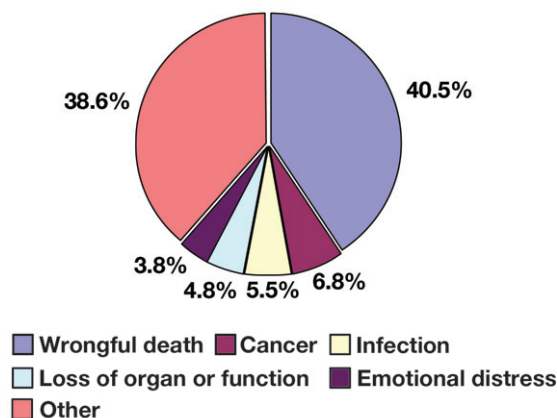
### Claims by Allegation

Diagnostic-related allegations, such as incorrect diagnosis or failure to diagnose, account for 39% of open and closed claims, while medication errors account for approximately 18%. The allegation that an NP provided services outside of the designated scope of practice (as defined by statute, regulation, or protocol) is infrequent. However, this allegation results in the highest average severity among the closed claims. Figure 3 and Table 3 show distribution of open and closed claims by allegation and severity by allegation, respectively.

### Closed Claims with the Highest Indemnity Payments

The average indemnity paid by CNA for NP closed claims is approximately \$165,000. However, 25% of the closed claims incurred indemnity payments equal to or greater than \$250,000. CNA typically issues NP professional liability policies with limits of liability for indemnity payments of \$1 million per occurrence. Expenses are covered in addition to the indemnity limit. The structure of the policies thus affects the average indemnity payment for claims in the highest severity category. Tables 4

**Figure 2. Distribution of open and closed claims by injury.**

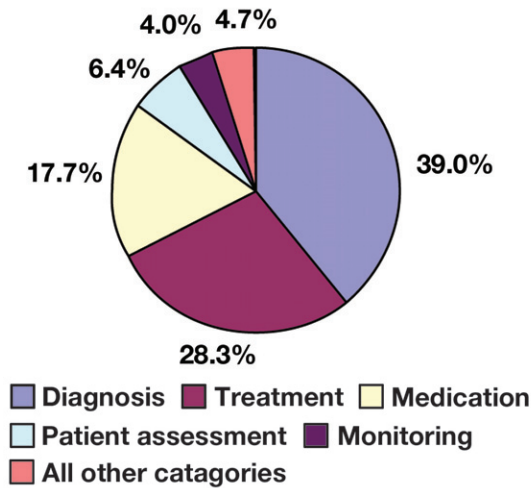


**Table 2. Severity by Injury (Closed Claims with Indemnity Payment)**

Injury	Percentage of Closed Claims with Paid Indemnity	Average Paid Indemnity
Fetal/infant birth-related brain injury*	0.5	\$850,000
Brain injury other than birth-related	2.8	\$611,111
Paralysis*	1.4	\$350,000
Cancer	7.5	\$212,688
Loss of organ or organ function	5.2	\$194,318
Wrongful death	40.4	\$189,956
Cardiac condition	1.9	\$168,550
Dislocation	1.4	\$161,667

\* Severity is based on three or fewer closed claims.

**Figure 3.** Distribution of open and closed claims by allegation.



**Table 3. Severity by Allegation (Closed Claims with Indemnity Payment)**

Allegation Category	Percentage of Closed Claims with Indemnity Payment	Average Paid Indemnity
Scope of practice*	0.9	\$450,000
Patient assessment	6.1	\$269,154
Diagnosis	46.0	\$186,168
Documentation*	0.9	\$162,500
Medication	18.3	\$147,554
Monitoring	2.3	\$114,400
Treatment	23.9	\$111,971
Equipment*	0.5	\$60,000
Practitioner conduct*	0.9	\$36,250

\* Severity is based on three or fewer closed claims.

and 5 include analysis by severity and closed claims with indemnity payments.

**HIGHLIGHTS FROM THE NSO 2009 ADVANCED PRACTICE NURSE SURVEY**

NSO engaged Kretschman Research & Consulting to survey NPs on the relationship between professional liability claims and a variety of demographic and professional factors. The survey participants included NPs who have participated in the NSO insurance program, comprising those

who have and have not experienced claims. Key survey findings are excerpted in the following pages. Because the questions are labeled as they appear in the full survey, numbering is not always sequential. A link to the full report findings, including an explanation of statistical methods, is available at [www.nso.com/NPclaimstudy2009](http://www.nso.com/NPclaimstudy2009).

**Methodology**

The survey was conducted during June and July 2009. For these purposes, the definition of NP includes clinical nurse specialists, except where clinical nurse specialists are cited separately. Please note that registered nurses, certified registered nurse anesthetists, and certified nurse midwives were not included. All NPs actively insured by NSO were eligible to participate in the survey. Of the approximately 25,000 NPs invited to participate, 1,380 were identified as having filed a professional liability claim with NSO/CNA in the past 5 years. In addition to actively insured NPs, the sample included those with an incident in the same timeframe who have since not renewed their CNA/NSO policies. The findings are based on self-reported information and thus may be affected by the respondents' perceptions and recollections of the requested information.

**Selected Results**

• **Demographics**

The majority of survey respondents identified themselves as NPs (94.6%), as opposed to clinical nurse specialists or "other." The sample was primarily female (92.8%). The age of respondents was as follows: 18 to 29 years, 3.9%; 30 to 49, 42.8%; 50 to 64, 49.9%, and 65 and over, 3.3%. (The total is slightly under 100%.) Ninety percent possessed a master's degree, and 5.8% held a doctoral degree, while 41.2% worked in a suburban area, 36.6% in an urban area, and 22.2% in a rural area.

• **Traditional On-Site Versus Online Educational Environment (Q2)**

Eighty-eight percent of all nurse respondents and 89% of claim respondents said they used an on-site university program to achieve their NP designation. Only 5% of all NPs and 6% of claim respondents achieved NP status using online programs exclusively.

• **Number of Clinical Hours Required in NP Program (Q6)**

NPs with and without claims recalled spending

**Table 4. Analysis by Severity (Closed Claims with Indemnity Payment)**

Indemnity Payment	Percentage of Closed Claims with Indemnity Payment	Average Paid Indemnity	Average Paid Expense
Less than \$250,000	74.6	\$64,078	\$45,815
\$250,000 - \$500,000	18.3	\$352,430	\$72,985
Greater than \$500,00	7.0	\$747,000	\$78,412

**Table 5. Closed Claims with Indemnity Payment of \$500,000 or More**

Allegation	Injury	Paid Indemnity	Specialty	Location
Failure to diagnose and treat lung cancer	Wrongful death	\$1,000,000	Family medicine	Clinic
Failure to diagnose endometrial cancer	Cancer	\$1,000,000	Obstetrics/gynecology	Medical care office
Failure to diagnose cardiac disease, leading to myocardial infarction and death	Wrongful death	\$1,000,000	Adult/geriatric	Clinic
Failure to properly assess intracranial bleeding in infant, leading to severe developmental and cognitive delays	Brain injury	\$1,000,000	Pediatric/neonatal	Emergency department
Incorrectly prescribed weight loss medication, resulting in cerebral hemorrhage	Brain injury	\$855,000	Adult/geriatric	Clinic
Failure to provide appropriate prenatal care, resulting in child born with cerebral palsy	Birth-related brain injury	\$850,000	Pediatric/neonatal	Medical care office
Failure to properly discontinue prescription of medication, resulting in permanent disability	Brain injury	\$775,000	Adult/geriatric	Hospital inpatient services
Failure to diagnose bacterial endocarditis after several office visits with recurrent complaints	Paralysis	\$750,000	Adult/geriatric	Clinic
Incorrect diagnosis of bursitis, resulting in myocardial infarction and death	Wrongful death	\$650,000	Family medicine	Freestanding urgent care
Failure to assess medical history, resulting in failure to diagnose Fournier's disease	Loss of organ	\$625,000	Family medicine	Clinic
Failure to seek appropriate consultation after several office visits with recurrent complaints of neurological deficits	Neurological deficit/injury	\$600,000	Family medicine	Medical care office
Failure to obtain consultation after change in condition, resulting in vegetative state	Brain injury	\$550,000	Pediatric/neonatal	Hospital inpatient services
Incorrectly prescribed wrong medication, resulting in burns over 50% of the body	Scars(s)/scarring	\$550,000	Psychiatric	Clinic-non-hospital-based
Improperly ordered angiogram without physician consultation, resulting in death	Wrongful death	\$500,000	Adult/geriatric	Hospital inpatient services
Incorrectly prescribed dose of medication, resulting in infant death	Wrongful death	\$500,000	Pediatric/neonatal	Medical care office

nearly the same number of clinical hours in their NP program. On average, respondents spent 636 clinical hours in their program.

**• Years as a Registered Nurse before Becoming an NP (Q7)**

Approximately 5% of the NPs were registered nurses for less than 2 years before becoming certified as NPs. Approximately one-quarter were registered nurses for less than 6 years before receiving the NP certification. More than half of the NPs



**Table 6. Risk Management Recommendations for Diagnosis and Management**

- ✓ Diligently screen for, monitor, and/or treat diseases known to have high morbidity and mortality, such as diabetes, heart disease, and cancer
- ✓ Utilize available clinical practice guidelines or protocols when establishing a diagnosis and providing treatment, documenting the justification for deviations from guidelines or protocols
- ✓ Seek timely consultation and advice regarding patients with recurring complaints and/or signs and symptoms that do not respond to the prescribed treatment
- ✓ Document the decision-making process that led to the diagnosis and treatment plan
- ✓ Notify patients when screening is due and follow up if patients do not respond, documenting all communication

CNA HealthPro Nurse Practitioner Claims Analysis 1998-2008, p. 24.

practiced for more than 10 years as a registered nurse before acquiring their NP designation.

• **Years Practicing as an NP (Q13)**

On average, NPs with claims had 7.1 years of experience at the time of the incident, while those without claims average 9.7 years of experience.

• **Significance of a Mentor (Q14)**

NPs with claims were more likely than those without claims to have been mentored during their first 2 years of advanced practice (52% versus 37%). For those who had a mentor, the mentor was most often a physician. NPs with claims were more likely than those without to have had a physician mentor (87% versus 77%). NPs without claims were more likely to have had an NP for a mentor (51% versus 30%).

• **Years Working in This Particular Position (Q19)**

At the time of the incident, 53% of the NPs with claims had worked in the designated position for less than 4 years, and 69% had worked in the position for less than 6 years. On average, NPs have worked in their current specialty area position for 5.1 years; NPs with claims had been working approximately the same amount of time.

• **Daily Patient Workload (Q22)**

Patient workload may contribute to malpractice exposure. NPs with claims report greater daily patient workloads than those without claims. While 45% of NPs without claims saw fewer than 15 patients per day, only 30% of those with claims tended to see fewer than 15 patients daily at the time of the incident. The NPs surveyed said they typically see an average of 16 patients per day. Those who have experienced claims reportedly saw an average of more than 18 patients daily at the time of the incident. If NPs who do not see any patients are excluded, the NPs who had claims were seeing an average of 19 patients per day.

• **Overtime (Q24)**

The vast majority of NPs report that they were not required to work overtime.

• **Electronic Medical Records (Q27)**

NPs who had claims were twice as likely to have used handwritten medical records at the time of the incident than were NPs without claims (72% versus 36%). They were also less likely to have been using a combination of electronic and handwritten medical records (16% versus 32%) at the time of the incident.

**NSO SURVEY UPDATE**

A second-phase analysis of the original NSO survey results was published in April 2010. In this second analysis, claims were redefined to include only those which had a significant reserve (more than just a few dollars) or that actually resulted in a payment (indemnity or expense). Of the 287 original respondents reporting a claim within 5 years, 152 claims were included in the analysis. This analysis incorporates claims data from the CNA HealthPro claims analysis matched to these 152 survey respondents reporting a claim within the past 5 years. These 152 APNs with claims were compared to 2,750 APNs without claims in an attempt to identify potential predictors of liability claims.

Several interesting findings emerge from this updated second-phase analysis. For example, APNs mentored by a physician during their first 2 years of practice were observed to have average claims paid/reserved that were 3.88 times higher than APNs with other mentors and 2.16 times higher than all other APNs, including those who had no mentor. This full report of the NSO survey is available at [www.nso.com/nursing-resources/claim-studies.jsp](http://www.nso.com/nursing-resources/claim-studies.jsp).

*Continued on page 122*

5. Moestrup S, Verroust P. Mammalian receptors of vitamin B12 binding. In: Banerjee R, ed. *Chemistry and biochemistry of B12*. New York: Wiley Interscience; 1999: 475-488.
6. Clark R, Grimley EJ, Schneede J, et al. Vitamin B12 deficiency in later life. *Age Aging*. 2004;33:34-41.
7. National Research Council. *Recommended Dietary Allowances*, 10th ed. Washington DC: National Academy Press; 1989: 158-165.
8. Tucker KL, Rich S, Rosenbery I, et al. Plasma vitamin B-12 concentrations relate to intake source in the Framingham Offspring Study. *Am J Clin Nutr*. 2000;71:514-522.
9. Nettina SM. A new look at vitamin B12 deficiency. *Nurs Pract*. 2009;34:19-24.
10. Hilgen-Bryan R. Are we missing vitamin B12 deficiency in the primary care setting? *J Nurs Pract*. 2010;6:519-523.
11. Miller A, Furlong D, Burrows BA, et al. Bound vitamin B12 absorption in patients with low serum B12 levels. *Am J Hematol*. 1992;40:163-166.
12. Ruscian J, Marik I, Kaptan LK, et al. Vitamin B12 deficiency associated with H2 receptor antagonists and proton pump inhibitors. *Ann Pharmacother*. 2002;36:812-816.
13. Andres E, Federia L. Vitamin B12 deficiency in patients receiving metformin: clinical evidence. *Arch Intern Med*. 2007;167:729-730.
14. Smoot TM, Xu P, Hilseniath P, et al. Gastric bypass surgery in the United States 1998-2002. *Am J Public Health*. 2006;96:1187-1189.
15. Willet WC, Sampson L, Stampfer MJ, et al. Reproducibility and validity of a semiquantitative food frequency questionnaire. *Am J Epidemiol*. 1985;122:51-65.
16. Jacques PF, Sulsky SI, Sadowski JA, et al. Comparison of micronutrient intake measured by a dietary questionnaire and biochemical indicators of micronutrient status. *Am J Clin Nutr*. 1993;57:182-189.
17. Nexø E, Hansen M, Rasmussen K, et al. How to diagnose cobalamin deficiency. *Scand J Clin Lab Invest Suppl*. 1994;219:61-76.
18. Council on Scientific Affairs, American Medical Association. Vitamin preparations as dietary supplements and as therapeutic agents. *JAMA*. 1987;257:1926-1936.
19. Tucker KL, Olson B, Bakun P, et al. Breakfast cereal fortified with folic acid, vitamin B-6, and vitamin B-12 increases vitamin concentrations and reduces homocysteine concentrations: a randomized trial. *Am J Clin Nutr*. 2004;79:805-811.
20. Bor MV, Lydeking-Olsen E, Møller J, et al. A daily intake of approximately 6 µg vitamin B-12 appears to saturate all the vitamin B-12 related variables in Danish postmenopausal women. *Am J Clin Nutr*. 2006;83:52-58.
21. van Walraven C, Austin P, Naylor P. Vitamin B12 injection versus oral supplement. *Can Fam Physicians*. 2001;47:79-86.

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### IMPORTANCE TO PRACTICING NPs

These findings reflect liability data about a small subset of CNA/NSO-insured NPs. It is important to understand that these findings may not apply to the entire NP population, now numbering over 158,000. However, the findings are compelling and should serve to raise NP awareness about the importance of mitigating liability risk. NPs are central to a paradigm shift in healthcare delivery and are gaining more autonomy. With more autonomy comes more accountability. See [Table 6](#) for a partial list of risk management recommendations from the CNA HealthPro Nurse Practitioner Claims Analysis 1998-2008.

### CONCLUSION

Together, the CNA HealthPro claims analysis and NSO survey reveal that professional liability remains a concern for all NPs, regardless of specialty, location, training, or experience. Despite recent tort reform measures and innovative defense strategies, claim severity is trending upward. This study is a reminder of the ongoing need for NPs to be aware of the risks inherent in providing healthcare services and to take effective measures to protect patients and minimize liability exposure. JNP

*Editor's Note: CNA and NSO contributed information to this article and approved the summaries herein.*

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