



Survey of Nurses 2008

EXECUTIVE SUMMARY

In 2008, the Michigan Center for Nursing conducted the fifth annual survey of nurses licensed in Michigan to collect data on their employment status, geographic distribution, age, plans to continue practicing, work setting, practice area, education, gender, and racial/ethnic background. The survey also includes questions related to nurses' decisions to leave a position in nursing and the factors that led to these decisions.

Responses from a mailed survey and Web-based survey were combined and analyzed. In 2008, the total sample consisted of

- 37,054 registered nurse (RN) surveys, yielding a margin of error of ± 0.5 percent with 95 percent confidence; and
- 7,520 licensed practical nurse (LPN) surveys, yielding a margin of error of ± 1.0 percent with 95 percent confidence.

All nurses are required to renew their license every two years after receiving their first license, which results in two approximately equal cohorts of nurses. Analysis of the five years of survey data shows a difference between these two cohorts of nurses in age distribution. The cohort of nurses who renewed their licenses during 2005 and again in 2007 is older than the cohort of nurses who renewed their licenses in 2004, 2006, and 2008. Therefore, survey responses that may be affected by age—such as plans to continue practicing nursing—should be compared only to responses received from the same license renewal cohort two years ago. If differences between survey findings from one year to another are statistically significant (i.e., outside of the margin of error), they are noted in the text.

Key findings from the 2008 survey show that:

- Approximately 84 percent of licensed RNs and 80 percent of licensed LPNs report that they are *active* in nursing—working in nursing or a related area full- or part-time. These percentages have changed very little since the survey of nurses was implemented in 2004.
- An estimated 93,657 licensed registered nurses are working in nursing or a related area *in Michigan*—about 78,000 (83 percent) of these RNs provide direct patient care services in their main nursing position.
- An estimated 20,700 licensed practical nurses are working in nursing or a related area *in Michigan*—about 18,800 (91 percent) of these LPNs provide direct patient care services.

- Only about 2 percent of licensed nurses are unemployed and seeking employment in nursing; this number is unchanged from previous survey findings.
- Of the RNs working full- or part-time in nursing, about 72 percent are employed 35 or more hours per week.
- The proportion of active LPNs employed 35 or more hours per week is about 68 percent.
- The ratio of active *registered nurses* to population in Michigan is approximately 930 RNs for every 100,000 people; the ratio of active *licensed practical nurses* to population is approximately 206 LPNs per 100,000 people.
- About 31 percent of *active* registered nurses in this license renewal cohort reported that they are aged 55 or older, compared to 18 percent of active registered nurses *in the same license renewal cohort* who responded to the survey in 2006. About 39 percent of *active* licensed practical nurses in this license renewal cohort are aged 55 or older, compared to 25 percent in 2006.
- About 39 percent of *active* RNs and 41 percent of *active* LPNs say they plan to practice nursing for only one to ten more years. This group is larger than it was in 2006 when 33 percent of all active RNs and 39 percent of all active LPNs *in the same license renewal cohort* said they planned to practice nursing for only one to ten more years.
- In 2008, about 21 percent of all RNs and LPNs surveyed said they had voluntarily left a nursing position in the last two years. Of these, more than half—58 percent of RNs and 63 percent of LPNs—said they left to take another nursing position with a different organization.
- Nearly three-fourths of *active* registered nurses (about 73 percent) are employed in either the hospital inpatient or outpatient setting; LPNs (about 45 percent) are most likely to be employed in nursing homes or long-term care facilities.
- About 6 percent of *active* RNs and 5 percent of active LPNs are male.¹
- About 6 percent of *active* RNs are African American, 4 percent are Asian, and 2 percent are American Indian/Alaskan Native.
- About 13 percent of *active* LPNs are African American, 2 percent are Asian, and 2 percent are American Indian/Alaskan Native.
- About 1 percent of *active* RNs and 2 percent of active LPNs are Spanish/Hispanic/Latino.

¹ The U.S. Census Bureau annual population estimates by sex, race, and Hispanic or Latino origin show the following percentages for Michigan in 2006: 49.2 percent male, 50.8 percent female, 82.6 percent white, 15.0 percent black or African American, 2.7 percent Asian, 1.2 percent American Indian or Alaskan Native, 0.1 percent Native Hawaiian or other Pacific Islander, and an estimated 3.9 percent Hispanic or Latino. The sum of percentages for race equals more than 100 because individuals may report more than one race.

INTRODUCTION

One of the goals of the Michigan Center for Nursing is to establish a central resource for nursing workforce data collection and analysis. The Michigan Center for Nursing conducts an annual survey of nurses licensed in Michigan to collect data on their employment status, geographic distribution, age, plans to continue practicing, work setting, practice area, education, gender, and racial/ethnic background. The survey instrument also includes a question on whether the nurse has left a position in nursing during the past two years, and, if so, what factors led to the decision to leave the previous nursing position. This report presents the survey findings for 2008 and a description of the survey methodology.

The samples for this survey and previous surveys were drawn from the Michigan licensure files maintained by the Michigan Department of Community Health. All nurses are required to renew their license every two years after receiving their first license, which results in two approximately equal cohorts of nurses. The survey was mailed to nurses renewing their license in 2008, along with their license renewal form, and the survey was also available online for nurses renewing their license via the Internet.

Analysis of survey data shows a difference between the two cohorts of nurses in age distribution. The cohort of nurses who renewed their licenses during 2005 and again in 2007 is older than the cohort of nurses who renewed their licenses in 2004, 2006, and 2008. Therefore, survey responses that may be affected by age—such as plans to continue practicing nursing—should be compared only to responses received from the *same* license renewal cohort in a previous survey.

In 2008, the survey sample consisted of 37,054 registered nurse (RN) surveys, yielding a margin of error of ± 0.5 percent with 95 percent confidence; and 7,520 licensed practical nurse (LPN) surveys, yielding a margin of error of ± 1.0 percent with 95 percent confidence. The large number of responses received and the sampling design assure that the survey findings are applicable to the entire population of nurses licensed in Michigan for characteristics that are not likely to be affected by a nurse's age. If differences between survey findings from one year to another are statistically significant (i.e., outside of the margin of error), they are noted in the text.

NUMBER OF NURSES

The total number of nurses licensed by the State of Michigan is 152,926 (as of January 1, 2008). Of these, 125,402 are registered nurses (RNs) and 27,524 are licensed practical nurses (LPNs). The total number of nurses licensed by Michigan (including both active and inactive RNs and LPNs) has increased by 3,444 since 2007.² The number of licensed RNs increased by 3,280 (2.7 percent), while the number of licenses for LPNs increased by 164 (0.6 percent) during the same period.

²Data for 2004, 2005, 2006, and 2008 are from the annual *Michigan Center for Nursing Survey of Nurses*. All data from earlier licensure surveys of nurses cited in this report are from the *Study of the Current and Future Needs of the Professional Nursing Workforce in Michigan*, prepared for the Michigan Department of Consumer and Industry Services by Public Sector Consultants Inc., July 2001.

In 2008, approximately 84 percent of licensed RNs report that they are active in nursing—working in nursing or a related area full- or part-time.³ About 80 percent of LPNs are working in nursing or a related area (see Exhibit 1). The percentage of licensed RNs and LPNs who are active in nursing is relatively unchanged from the proportions reported since 2004.

However, some nurses who are active in nursing are not working in Michigan, even though they hold a Michigan license. And some nurses working in positions in related areas, such as nursing education or administration, do not provide direct care services to patients. The following estimates are based on survey findings for 2008.

- An estimated 93,657 RNs are working in nursing or a related area *in Michigan*.
- An estimated 78,016 RNs working in Michigan (about 83 percent of active registered nurses) *provide direct patient care services* in their main nursing position.
- An estimated 20,700 LPNs are working in nursing or a related area *in Michigan*.
- An estimated 18,837 LPNs working in Michigan (about 91 percent of active licensed practical nurses) *provide direct patient care services* in their main nursing position.

Analysis of data in this report focuses on active nurses—those nurses who are working in nursing or a related area full- or part-time. Analysis of the data for these *active* nurses only shows that:

- About 72 percent of *active* RNs are employed 35 or more hours per week. This percentage has not changed since 2004.
- About 68 percent of *active* LPNs are employed 35 or more hours per week, which is relatively unchanged since 2004.

³ Throughout this report, the term “active” is used to refer to nurses who are working in nursing or a related area on a full-time or part-time basis. “Active” does not include approximately 2 percent of licensed nurses who are unemployed and seeking nursing work and could be considered part of the available nursing workforce.

EXHIBIT 1
Employment Status of RNs and LPNs in Michigan, 2008

	Registered Nurses		Licensed Practical Nurses	
	%	Number*	%	Number*
Total number of nurses licensed by Michigan		125,402		27,524
Total active nurses—employed in nursing or related area	84.2	105,588	79.5	21,882
Not employed, and seeking employment in nursing or related area	1.7	2,132	3.3	908
Employed, but not in nursing	2.7	3,386	4.8	1,321
Not employed, and seeking employment outside nursing	0.2	251	0.3	83
Temporarily not working and not looking for a job	4.6	5,768	5.6	1,541
Retired or no plans to return to work	6.6	8,277	6.4	1,762
Active nurses employed <i>in Michigan</i> (88.7 percent of active RNs, 94.6 percent of active LPNs)		93,657		20,700
Active nurses providing direct care services <i>in Michigan</i> (83.3 percent of active RNs employed in MI, 91.0 percent of active LPNs employed in MI)		78,016		18,837

*NOTE: The number of nurses licensed by Michigan is from the Michigan licensure files maintained by the Michigan Department of Community Health as of January 1, 2008. All other numbers are estimated based on data from the *Michigan Center for Nursing Survey of Nurses 2008*.

RATIO OF NURSES TO POPULATION

Based on the employment location reported by nurses, the estimated ratio of active nurses to population in Michigan is 1,135 per 100,000.⁴ This nurse-to-population ratio estimate includes *both* LPNs and RNs who are employed in nursing full-time or part-time in Michigan. The estimated ratio of active *registered nurses* to population in Michigan is 930 for every 100,000 people. The ratio of active *licensed practical nurses* to population is 206 LPNs per 100,000 people.

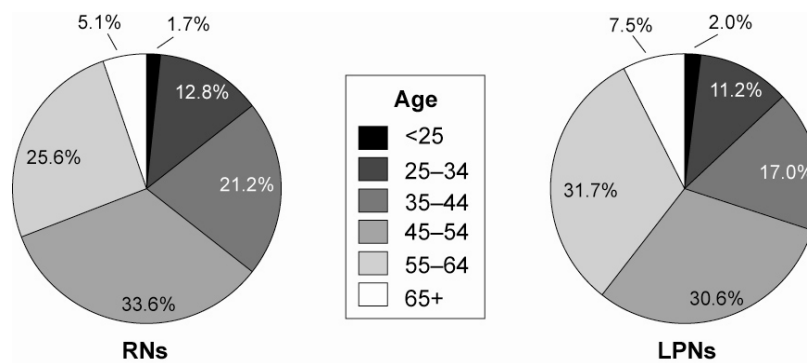
AGE OF NURSES

The proportion of active licensed nurses nearing retirement is increasing for both RNs and LPNs in Michigan, as shown by the following survey results.

- About 31 percent of *active* registered nurses in this license renewal cohort reported that they are aged 55 or older (see Exhibit 2), compared to 27 percent of active registered nurses in the license renewal cohort who responded to the survey in 2007. In the survey responses for 2008, the average age of active RNs licensed in Michigan is 50 years.
- About 39 percent of *active* licensed practical nurses in this license renewal cohort are aged 55 or older, compared to 35 percent in the license renewal cohort who responded to the survey in 2007. In the survey responses for 2008, the average age of active LPNs licensed in Michigan is 51 years.

The population of nurses in Michigan is continuing to age. In the 1998–99 licensure renewal survey, only 14 percent of RNs and 19 percent of LPNs were aged 55 or older.

EXHIBIT 2
Proportion of Active RNs and LPNs, by Age



SOURCE: Michigan Center for Nursing Survey of Nurses 2008.

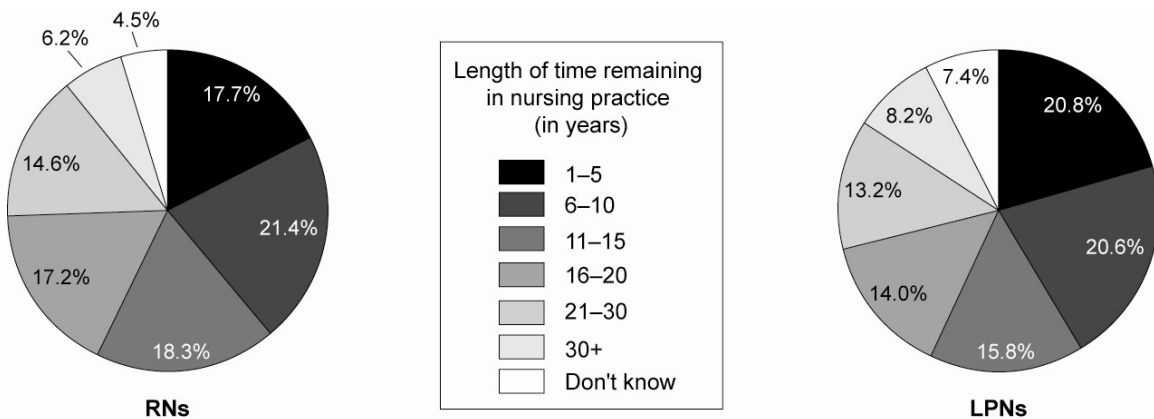
NOTE: Percentages presented here are based on bivariate analysis of age and employment status for all licensed nurses.

⁴ Nurse-to-population ratios for 2008 are calculated using the employment location reported by nurses and the U.S. Census Bureau annual population estimates for Michigan for 2007. Prior to 2004, licensure surveys used the mailing address of licensed nurses to estimate the number of nurses active in Michigan and nurse-to-population ratios. Using this methodology, the nurse-to-population ratio for 1998–99 was 1,079 nurses per 100,000 people.

LENGTH OF TIME REMAINING IN NURSING

It is not just the nurses nearing retirement age who are planning to stop practicing nursing in the near future. As shown in Exhibit 3, about 39 percent of *all* active RNs and 41 percent of *all* active LPNs say they plan to practice nursing for only one to ten more years. This group is larger than it was in 2006, when 33 percent of all active RNs and 39 percent of all active LPNs *in the same license renewal cohort* said they planned to practice nursing for only one to ten more years.

EXHIBIT 3
Plans to Practice Nursing for Active LPNs and RNs



SOURCE: Michigan Center for Nursing Survey of Nurses 2008.

VOLUNTARY CHANGE IN NURSING POSITION

About 21 percent of all RNs and 21 percent of all LPNs surveyed said they had voluntarily left a nursing position in the last two years.

- Of the RNs who said they had voluntarily left a nursing position, 58 percent said it was to take another nursing position with a different organization and about 17 percent said it was to take another nursing position in the same organization.
- Of the LPNs who said they had voluntarily left a nursing position, 63 percent said it was to take another nursing position with a different organization and about 6 percent said it was to take another nursing position in the same organization.
- For RNs and LPNs who had left a nursing position, about 20 percent of RNs and 23 percent of LPNs said it was to retire or quit nursing.
- About 6 percent of the RNs and about 8 percent of the LPNs who had left a nursing position said it was to take a position outside nursing.

For those nurses who left a nursing position, the factors leading to their decision that were mentioned most often, in descending order, were “general lack of job satisfaction”; “personal or family concerns”; “physical demands of the job”; and “inadequate salary/wages” (see Exhibit 4).

EXHIBIT 4
Factors Influencing Decisions to Leave a Nursing Position, 2008

Factors	RNs	LPNs
General lack of job satisfaction	41.3%	36.9%
Personal or family concerns	27.1	28.2
Physical demands of the job	21.2	21.3
Inadequate salary/wages	21.0	24.6
Career promotion	14.5	8.6
Age	13.9	17.1
Increasing administrative burden	12.8	12.5
Employer/employee conflict	12.3	14.4
Inadequate benefits	11.5	16.3
Childbearing/childrearing	6.8	4.2
Opportunity to work in nursing administration	3.9	2.1
Opportunity to work in nursing education	3.1	1.3

SOURCE: *Michigan Center for Nursing Survey of Nurses 2008.*

NOTE: Nurses were asked to indicate all factors that led to their decision to leave a nursing position in the last two years, so the sum of the percentages will be more than 100 percent.

WORK SETTING

Nearly three-fourths of active registered nurses (about 73 percent) are employed in either the hospital inpatient or outpatient setting (see Exhibit 5). The percentage of LPNs employed in the hospital setting has declined since 1992–93, from 44 percent to about 23 percent in 2008. Almost half of all active LPNs (about 45 percent) are employed in nursing homes or long-term care facilities.

EXHIBIT 5
Employment Settings of Active RNs and LPNs, 2008

Employment Settings	RNs	LPNs
Hospital inpatient	56.5%	17.8%
Hospital outpatient	16.2	5.4
Non-hospital outpatient	4.3	2.6
Physician's office	6.5	18.0
Nursing home/long-term care facility	6.8	44.6
Home health care	6.9	11.8
Public/community health	3.8	2.2
School health	1.2	0.9
Hospice	2.7	2.6
Nursing education	4.9	1.3
Insurance company/health plan	2.2	0.8
Traveling/temporary nurse	1.7	1.4
Other	9.0	7.2

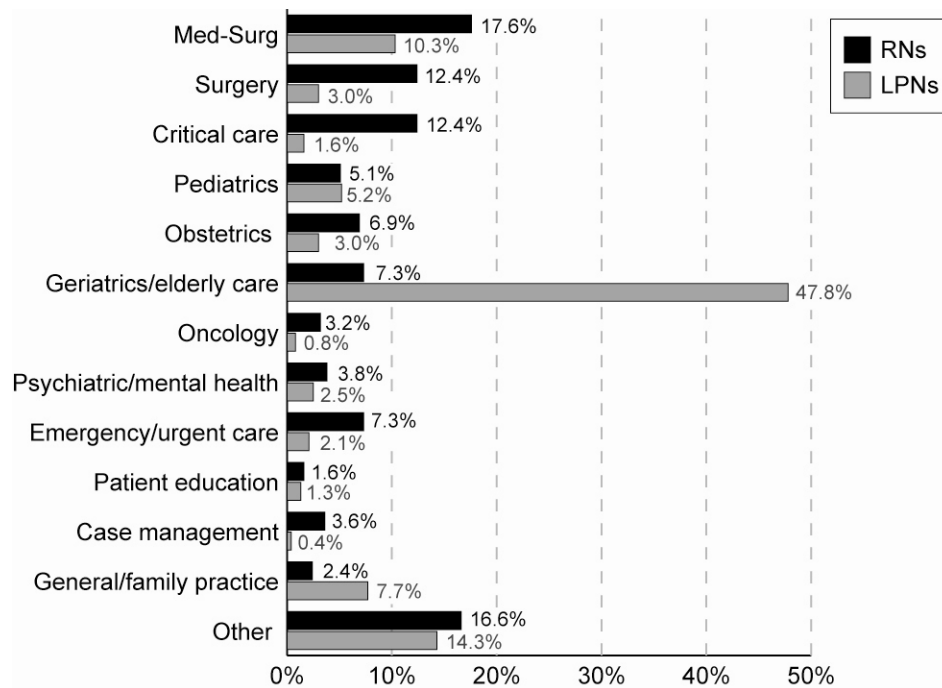
SOURCE: *Michigan Center for Nursing Survey of Nurses 2008.*

NOTE: Nurses were asked to indicate all of their current employment settings, so the sum of the percentages will be more than 100 percent.

PRACTICE AREA

Approximately 83 percent of active RNs and 91 percent of active LPNs report that their main nursing position involves providing direct care services to patients/families. These nurses were asked to identify their main practice area from a list of areas given (see Exhibit 6). The practice area that RNs identified most often out of the choices offered was “med-surg.” Almost half (about 48 percent) of all active LPNs identified their main practice area as “geriatrics/elderly care.”

EXHIBIT 6
Main Practice Area of Active RNs and LPNs, 2008



SOURCE: Michigan Center for Nursing Survey of Nurses 2008.

EDUCATION

All nurses responding to the MCN Survey of Nurses were asked to indicate their level of education (i.e., all degrees completed).

- Approximately 6 percent of active RNs also hold an LPN diploma or an LPN certificate of nursing.
- About 22 percent of active RNs have an RN diploma in nursing, 46 percent have an associate’s degree in nursing, and 39 percent hold a bachelor’s degree in nursing. (Nurses may hold more than one nursing degree, so percentages total more than 100.)
- About 7 percent of active RNs hold a master’s degree in nursing; about 5 percent hold a master’s degree in another field; and less than 1 percent (0.4 percent) of registered nurses hold a doctorate in nursing.

- Approximately 97 percent of active LPNs have an LPN diploma or an LPN certificate of nursing.
- About 9 percent of RNs and 8 percent of LPNs report they hold some other degree.

RACIAL/ETHNIC BACKGROUND AND GENDER

Data on racial/ethnic and gender characteristics of the nursing population in Michigan show that:

- 6 percent of active RNs and 5 percent of active LPNs are male
- 88 percent of active RNs are white, 6 percent are African American, 2 percent are American Indian/Alaskan Native, 4 percent are Asian, and less than 1 percent are Middle Easterner or Pacific Islander
- 83 percent of active LPNs are white, 13 percent are African American, 2 percent are American Indian/Alaskan Native, 2 percent are Asian, and less than 1 percent are Middle Easterner or Pacific Islander
- About 2 percent of both RNs and LPNs are Spanish/Hispanic/Latino

METHODOLOGY

The Michigan Center for Nursing contracted with Public Sector Consultants Inc. (PSC) for development, implementation, and analysis of the survey of nurses. One instrument for both RNs and LPNs was designed in collaboration with the Michigan Center for Nursing Advisory Board. The instrument contains questions about employment setting, practice area, the length of time that the respondent intends to stay in the nursing profession, as well as a number of demographic questions (age, gender, race/ethnicity). The survey instrument also includes questions on whether the nurse had left a position in nursing during the past two years, and, if so, what factors led to the decision to leave the previous nursing position. (The survey instrument and response frequencies for RNs and LPNs are provided in appendices, with data from previous surveys as a reference.)

The samples for these surveys were drawn from the Michigan licensure files maintained by the Michigan Department of Community Health. All nurses are required to renew their license every two years. The universe of nurses is divided into two cohorts of roughly equal size depending on the year in which each nurse was first licensed. The surveys were mailed to nurses renewing their license in 2008, along with their license renewal forms. A total of 73,699 nurses (61,034 RNs and 12,665 LPNs) renewed their license. Nurses could either return the paper version of the survey with their renewal or complete both the survey and their license renewal online. The large number of paper and Web-based surveys collected permit a robust analysis. Combining the responses from the paper version with the results from the Web survey resulted in a total of

- 37,054 completed RN surveys, yielding a margin of error of ± 0.5 percent with 95 percent confidence; and
- 7,520 completed LPN surveys, yielding a margin of error of ± 1.0 percent with 95 percent confidence.

These totals include fully and partially completed surveys (i.e., those with information missing for one or more variables); thus sample size for individual variables will differ and the margin of error may change slightly depending upon the amount of missing data for that particular variable.

Appendix A

Survey Instrument and RN Response Frequencies¹ 2004, 2005, 2006, 2007 and 2008²

For 2008 survey results, N=37,054

This information is being collected by the Michigan Center for Nursing to describe the supply of and demand for nurses in Michigan. Data from this survey will be used to inform state and local decision making regarding the recruitment, education, and employment of nurses in Michigan. The information you provide will be confidential; the identity of individual respondents will not be shared with anyone. Completion of the questions below is voluntary and does not affect your license. However, this information is important and your participation is encouraged and truly appreciated. *Please complete the survey and return it with your renewal application in the envelope provided.* If you are both an LPN and an RN, complete and return only one survey.

If you renew your license via the Internet, you will have the opportunity to complete this survey online.

Go to www.michigancenterfornursing.org to view survey results and to sign up to receive Michigan Center for Nursing News & Updates electronically.

1. In what year were you born? (Note: Response frequencies are for active nurses only. N =31,049 in 2008.) Average age = 50.

Age	2004 (Active only)	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
<25	1.4%	1.3%	1.6%	1.3%	1.7%
25–34	18.9	15.9	18.4	13.2	12.8
35–44	27.1	24.7	28.8	22.5	21.2
45–54	35.2	36.6	32.8	35.7	33.6
55–64	15.7	19.3	16.1	23.3	25.6
65+	1.6	2.8	2.2	4.0	5.1

2. Are you a licensed practical nurse (LPN), a registered nurse (RN), or both? (Mark **one**. If you are both an LPN and an RN, complete and return only one survey.)

	RNs 2005	RNs 2006	RNs 2007	RNs 2008
RN only	96.4%	95.8%	96.6%	96.4%
Both LPN and RN	3.6	4.2	3.4	3.6

NOTE: This question was not asked on the 2004 survey.

¹ Frequencies reported may not equal 100 percent due to rounding.

² All nurses are required to renew their license every two years after receiving their first license, which results in two approximately equal cohorts of nurses. Analysis of survey data shows a difference between these two cohorts of nurses in age distribution. Therefore, survey responses that may be affected by age—such as plans to continue practicing nursing—should be compared only to responses received from the same license renewal cohort two years ago (e.g., 2007 compared to 2005, 2008 compared to 2006).

3. What is your education background? (Mark **all** that apply)

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) LPN diploma/certificate of nursing	—	3.7%	5.5%	5.8%	5.6%
LPN certificate of achievement	—	1.9	—	—	—
b) RN diploma in nursing	—	22.3	18.7	21.9	22.0
c) Associate's degree in nursing	42.1%	44.4	48.4	45.8	45.5
d) Bachelor's degree in nursing	40.3	37.4	37.0	38.0	38.6
e) Master's degree in nursing	8.4	7.4	6.4	6.8	7.0
f) Master's degree in other field	—	—	3.9	4.4	4.7
g) Doctorate in nursing	0.4	0.3	0.3	0.3	0.4
h) Doctorate in other field	—	—	—	—	0.4
i) Other degree	9.4	10.6	8.0	8.8	8.9

NOTE: In 2004, 21.8% of all RNs reported they held a diploma in nursing. On the 2005 survey, "diploma in nursing" was replaced as a response option by "LPN diploma in nursing," "LPN certificate of achievement," and "RN diploma in nursing." On the 2006 and 2007 survey, "LPN diploma in nursing" and "LPN certificate of achievement" were combined as one response option.

4. What is your current employment status? (Mark **one**)

	2004	2005	2006	2007	2008
a) 35 or more hours per week in nursing or related area	62.3%	60.2%	61.6%	60.6%	60.8%
b) Less than 35 hours per week in nursing or related area	24.5	24.9	23.0	24.2	23.4
c) Employed, but not in nursing	3.1	2.9	3.3	2.7	2.7
d) Not employed, and seeking employment in nursing or related area	1.8	1.7	1.8	1.6	1.7
e) Not employed, and seeking employment outside of nursing	0.4	0.2	0.2	0.2	0.2
f) Temporarily not working and not looking for a job	4.3	4.9	5.1	4.8	4.6
g) Retired or with no plans to return to work	3.7	5.1	4.9	6.0	6.6

5. Identify your current employment setting(s). (Mark **all** that apply)

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) None (not active in nursing)	4.7%	0.2%	0.2%	0.2%	0.2%
b) Hospital inpatient	50.2	57.7	58.9	57.5	56.5
c) Hospital outpatient	13.7	15.9	14.6	16.1	16.2

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
d) Non-hospital outpatient	2.6%	3.7%	3.8%	3.8%	4.3%
e) Physician's office	5.4	6.9	6.4	6.6	6.5
f) Nursing home/long-term care facility	5.6	7.2	7.1	6.8	6.8
g) Home health care	5.1	6.8	7.3	6.9	6.9
h) Public/community health	3.6	3.9	3.6	3.9	3.8
i) School health	1.1	1.3	1.2	1.3	1.2
j) Hospice	2.2	2.3	2.6	2.7	2.7
k) Nursing education	4.7	4.7	4.3	4.9	4.9
l) Insurance company/health plan	1.9	1.9	1.9	2.0	2.2
m) Traveling/temporary nurse	2.6	2.3	2.8	1.8	1.7
n) Other	7.4	8.6	8.4	8.2	9.0

6. Does your main nursing position involve providing direct care services to patients/families?

	2004 (Active only)	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
Yes	82.6%	85.1%	85.7%	84.5%	83.3%
No	17.4	14.9	14.3	15.5	16.7%

7. If you provide direct care services, please identify your main practice area. (Mark **one**)
(Note: Response frequencies for 2005, 2006, and 2007 are for *active* nurses only.)

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) Med-Surg	17.9%	16.0%	17.5%	17.2%	17.6%
b) Surgery	11.7	11.4	10.5	12.5	12.4
c) Critical care	15.2	14.2	14.9	12.9	12.4
d) Pediatrics	5.9	5.2	5.6	5.0	5.1
e) Obstetrics	8.1	7.3	7.4	7.4	6.9
f) Geriatrics/elderly care	—	7.2	7.1	7.1	7.3
g) Oncology	—	2.8	2.9	3.1	3.2
h) Psychiatric/mental health	3.1	3.6	3.2	3.7	3.8
i) Emergency/urgent care	9.2	7.4	7.8	7.1	7.3
j) Patient education	2.2	2.1	2.7	1.7	1.6
k) Case management	5.1	7.7	11.8	3.8	3.6
l) General/family practice	3.3	2.0	1.2	2.5	2.4
m) Other	18.2	12.9	7.4	16.2	16.6

NOTE: "Geriatrics/elderly care" and "Oncology" were added as response options on the 2005 survey.

8. Where do you live? (Mark **one**)

	2005 (Active only)	2007 (Active only)	2008 (Active only)
a) Michigan	87.6%	88.6%	88.0%
b) Other state	8.9	8.5	9.4
c) Canada	3.3	2.7	2.2
d) Other nation	0.2	0.1	0.4

Note: As a result of a mailing error, the responses to this question were not valid for 2006.

9. Where is your primary place of employment? (Mark **one**)

	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) Michigan	89.4%	87.9%	89.8%	88.7%
b) Other state in the U.S.	9.4	11.4	9.1	10.0
c) Canada	1.0	0.5	1.0	0.9
d) Other nation	0.2	0.2	0.2	0.3

10. If you live in the U.S. or if your primary place of employment is in the U.S., what are the Zip Codes of your residence and primary place of employment?

11. Did you graduate from a nursing school in the United States or in another nation?

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) United States	93.7%	92.8%	95.1%	93.4%	93.6%
b) Other nation	6.3	7.2	4.9	6.6	6.4

One of the goals of the Michigan Center for Nursing is to increase diversity within the nursing profession. It would be helpful if you would answer the following questions:

12. What is your gender?

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) Female	92.2%	93.2%	92.1%	93.8	94.0%
b) Male	7.8	6.8	7.9	6.2	6.0

13. Are you Spanish/Hispanic/Latino?

	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) Yes	1.5%	1.3%	1.4%
b) No	98.5	98.7	98.6

14. What is your racial/ethnic background?

	2004	2005 (Active only)	2006 Categories	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) American Indian/ Alaskan Native	1.0%	0.7%	American Indian/ Alaskan Native	1.3%	1.4%	1.5%
b) Asian or Pacific Islander	3.4	4.0	Asian	3.3	3.9	4.3
			Native Hawaiian or Pacific Islander	0.2	0.3	0.2
c) Black, non- Hispanic	5.5	6.0	Black or African American	7.6	6.2	5.6
d) Hispanic	0.9	1.0				
e) White, non- Hispanic	87.7	86.9	White	86.0	87.4	87.7
f) Multiracial	0.8	0.8				
			Middle Easterner (Arab/ Chaldean/ Other)	0.3	0.3	0.4
g) Other/ unknown	0.7	0.7	Some other race/ ethnicity	0.7	1.5	1.5

15. To assist us in projecting the supply of nurses in the future, please tell us how much longer you plan to practice nursing.

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) 1–5 years	13.1%	14.8%	13.2%	16.8%	17.7%
b) 6–10 years	18.0	20.3	19.8	21.4	21.4
c) 11–15 years	17.9	19.5	19.3	18.9	18.3
d) 16–20 years	18.9	18.5	20.1	17.3	17.2
e) 21–30 years	14.8	15.2	16.4	14.7	14.6
f) More than 30 years	5.1	5.4	5.5	5.8	6.2
g) Don't know	12.2	6.3	5.7	5.2	4.5

16. Have you voluntarily left a nursing position in the last two years?

	2006 (all RNs)	2007 (all RNs)	2008 (all RNs)
a) Yes	21.7%	21.5%	20.8%
b) No	78.3	78.5	79.2

17. If you voluntarily left a nursing position in the last two years, was it to...(Mark **one**)

	2006 (% of RNs who left a position)	2007 (% of RNs who left a position)	2008 (% of RNs who left a position)
a) take another nursing position in the same organization?	15.6%	18.0%	16.8%
b) take another nursing position with a different organization?	56.1	57.4	57.5
c) take a position outside of nursing?	8.3	6.8	6.2
d) retire/quit nursing?	20.0	17.7	19.5

18. If you voluntarily left a nursing position in the last two years, what were the factors that led to this decision? (Mark **all** that apply)

	2006 (% of RNs who left a position)	2007 (% of RNs who left a position)	2008 (% of RNs who left a position)
a) Age	12.6%	12.5%	13.9%
b) General lack of job satisfaction	40.3	43.0	41.3
c) Childbearing/childrearing	10.7	7.5	6.8
d) Personal or family concerns	29.8	27.7	27.1
e) Increasing administrative burden	10.7	12.7	12.8
f) Physical demands of the job	20.3	20.9	21.2
g) Employer/employee conflict	14.1	13.0	12.3
h) Inadequate salary/wages	22.5	22.2	21.0
i) Inadequate benefits	11.9	12.2	11.5
j) Opportunity to work in nursing administration	3.2	3.9	3.9
k) Opportunity to work in nursing education	3.0	3.9	3.1
l) Career promotion	12.7	14.5	14.5

Appendix B

Survey Instrument and LPN Response Frequencies¹ 2004, 2005, 2006, 2007 and 2008²

For 2008 survey results, N=7,520

This information is being collected by the Michigan Center for Nursing to describe the supply of and demand for nurses in Michigan. Data from this survey will be used to inform state and local decision making regarding the recruitment, education, and employment of nurses in Michigan. The information you provide will be confidential; the identity of individual respondents will not be shared with anyone. Completion of the questions below is voluntary and does not affect your license. However, this information is important and your participation is encouraged and truly appreciated. *Please complete the survey and return it with your renewal application in the envelope provided.* If you are both an LPN and an RN, complete and return only one survey.

If you renew your license via the Internet, you will have the opportunity to complete this survey online.

Go to www.michigancenterfornursing.org to view survey results and to sign up to receive Michigan Center for Nursing News & Updates electronically.

1. In what year were you born? (Note: Response frequencies are for active nurses only. N = 5,828 in 2008.) Average age = 51.

Age	2004 (Active only)	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
<25	2.0%	5.0%	2.4%	2.1%	2.0%
25–34	18.0	9.2	16.2	11.2	11.2
35–44	24.2	20.6	23.5	18.0	17.0
45–54	31.3	35.7	33.1	33.9	30.6
55–64	22.0	24.9	20.9	28.7	31.7
65+	2.4	4.6	3.9	6.1	7.5

2. Are you a licensed practical nurse (LPN), a registered nurse (RN), or both? (Mark **one**. If you are both an LPN and an RN, complete and return only one survey.)

NOTE: This question was used only to identify respondents as RNs or LPNs and to determine the proportion of RNs who also hold a diploma/certificate as a LPN.

¹ Frequencies reported may not equal 100 percent due to rounding.

² All nurses are required to renew their license every two years after receiving their first license, which results in two approximately equal cohorts of nurses. Analysis of survey data shows a difference between these two cohorts of nurses in age distribution. Therefore, survey responses that may be affected by age—such as plans to continue practicing nursing—should be compared only to responses received from the same license renewal cohort two years ago (e.g., 2007 compared to 2005, 2008 compared to 2006).

3. What is your education background? (Mark **all** that apply)

	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) LPN diploma/certificate of nursing	78.7%	97.3%	97.1%	97.4%
LPN certificate of achievement	22.7	—	—	—
b) RN diploma in nursing	0.7	0.7	0.9	0.8
c) Associate's degree in nursing	3.5	3.8	3.9	3.4
d) Bachelor's degree in nursing	1.0	1.0	0.9	1.1
e) Master's degree in nursing	0.1	0.0	0.1	0.1
f) Master's degree in other field	—	0.4	0.5	0.5
g) Doctorate in nursing	0.0	0.0	0.0	0.0
h) Doctorate in other field	—	—	—	0.1
i) Other degree	5.5	7.1	7.5	8.3

NOTE: On the 2004 survey, LPNs were not asked for their education background.

4. What is your current employment status? (Mark **one**)

	2004	2005	2006	2007	2008
a) 35 or more hours per week in nursing or related area	56.7%	55.0%	57.4%	54.3%	54.3%
b) Less than 35 hours per week in nursing or related area	24.8	26.3	23.8	26.2	25.2
c) Employed, but not in nursing	5.4	4.8	4.9	4.3	4.8
d) Not employed, and seeking employment in nursing or related area	3.3	2.9	3.1	3.2	3.3
e) Not employed, and seeking employment outside of nursing	0.1	0.2	0.4	0.3	0.3
f) Temporarily not working and not looking for a job	5.0	5.8	6.1	5.6	5.6
g) Retired or with no plans to return to work	4.7	5.0	4.2	6.0	6.4

5. Identify your current employment setting(s). (Mark **all** that apply)

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) None (not active in nursing)	7.3%	0.4%	0.4%	0.4	0.3%
b) Hospital inpatient	19.3	21.0	18.4	18.0	17.8
c) Hospital outpatient	4.8	5.9	5.7	6.2	5.4
d) Non-hospital outpatient	2.1	2.8	2.9	2.7	2.6
e) Physician's office	12.1	17.0	16.4	17.0	18.0

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
f) Nursing home/long-term care facility	35.0%	44.4%	46.9%	44.5%	44.6%
g) Home health care	9.8	11.0	12.4	11.9	11.8
h) Public/community health	2.0	2.6	2.4	2.3	2.2
i) School health	1.6%	1.2%	0.9%	1.2%	0.9
j) Hospice	2.1	2.3	2.0	2.9	2.6
k) Nursing education	1.8	1.6	1.5	1.5	1.3
l) Insurance company/health plan	1.0	0.8	0.9	0.7	0.8
m) Traveling/temporary nurse	1.3	1.9	2.4	1.6	1.4
n) Other	8.4	7.0	6.7	7.1	7.2

6. Does your main nursing position involve providing direct care services to patients/families?

	2004 (Active only)	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
Yes	82.4%	91.5%	92.3%	91.3%	91.0%
No	17.6	8.5	7.7	8.7	9.0

7. If you provide direct care services, please identify your main practice area. (Mark **one**)
(Note: Response frequencies for 2005, 2006, and 2007 are for *active* nurses only.)

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) Med-Surg	24.4%	11.1%	11.2%	9.7%	10.3%
b) Surgery	3.0	2.8	2.7	3.0	3.0
c) Critical care	3.1	1.9	1.9	1.8	1.6
d) Pediatrics	7.3	4.4	4.7	4.6	5.2
e) Obstetrics	3.4	3.6	2.5	3.3	3.0
f) Geriatrics/elderly care	—	45.4	47.4	48.0	47.8
g) Oncology	—	0.9	0.6	0.9	0.8
h) Psychiatric/mental health	4.6	2.9	2.4	2.6	2.5
i) Emergency/urgent care	2.6	2.2	2.2	2.0	2.1
j) Patient education	5.2	2.5	3.6	1.1	1.3
k) Case management	2.8	3.8	7.0	0.8	0.4
l) General/family practice	13.8	6.7	5.3	8.6	7.7
m) Other	29.8	11.6	8.6	13.7	14.3

NOTE: "Geriatrics/elderly care" and "Oncology" were added as response options on the 2005 survey.

8. Where do you live? (Mark **one**)

	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) Michigan	95.5%	94.7%	95.0%	94.8%
b) Other state	4.3	5.1	4.7	5.0
c) Canada	0.1	0.2	0.2	0.2
d) Other nation	0.0	0.0	0.0	0.1

9. Where is your primary place of employment? (Mark **one**)

	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) Michigan	95.0%	94.4%	94.4	94.6%
b) Other state in the U.S.	4.9	5.4	5.3	5.3
c) Canada	0.1	0.1	0.2	0.1
d) Other nation	0.0	0.0	0.1	0.0

10. If you live in the U.S. or if your primary place of employment is in the U.S., what are the Zip Codes of your residence and primary place of employment?

11. Did you graduate from a nursing school in the United States or in another nation?

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) United States	98.6%	98.4%	98.7%	98.2%	98.3%
b) Other nation	1.4	1.6	1.3	1.8	1.7

One of the goals of the Michigan Center for Nursing is to increase diversity within the nursing profession. It would be helpful if you would answer the following questions:

12. What is your gender?

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) Female	94.2%	95.4%	95.6%	94.9%	95.5%
b) Male	5.8	4.6	4.4	5.1	4.5

13. Are you Spanish/Hispanic/Latino?

	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) Yes	2.1%	1.6%	1.6
b) No	97.9	98.4	98.4

14. What is your racial/ethnic background?

	2004	2005 (Active only)	2006 Categories	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) American Indian/Alaskan Native	1.6%	1.1%	American Indian/Alaskan Native	2.7%	2.4%	2.2%
b) Asian or Pacific Islander	1.5	1.7	Asian	1.4	1.7	2.0
			Native Hawaiian or Pacific Islander	0.1	0.2	0.2
c) Black, non-Hispanic	14.2	13.3	Black or African American	17.8	13.5	12.9
d) Hispanic	0.9	1.2				
e) White, non-Hispanic	80.5	81.4	White	77.3	82.2	82.8
f) Multiracial	0.9	0.8				
			Middle Easterner (Arab/ Chaldean/ Other)	0.2	0.1	0.1
g) Other/unknown	0.4	0.6	Some other race/ ethnicity	1.0	1.8	1.7

15. To assist us in projecting the supply of nurses in the future, please tell us how much longer you plan to practice nursing.

	2004	2005 (Active only)	2006 (Active only)	2007 (Active only)	2008 (Active only)
a) 1–5 years	14.4%	16.7%	17.2%	18.7%	20.8%
b) 6–10 years	18.2	21.3	21.7	21.9	20.6
c) 11–15 years	14.1	17.4	17.2	15.9	15.8
d) 16–20 years	15.7	16.0	16.1	15.0	14.0
e) 21–30 years	13.5	12.7	13.4	12.5	13.2
f) More than 30 years	7.8	7.7	7.4	8.3	8.2
g) Don't know	16.3	8.2	6.9	7.7	7.4

16. Have you voluntarily left a nursing position in the last two years?

	2006 (% of all LPNs)	2007 (% of all LPNs)	2008 (% of all LPNs)
a) Yes	21.4%	20.9%	21.3%
b) No	78.6	79.1	78.7

17. If you voluntarily left a nursing position in the last two years, was it to... (Mark **one**)

	2006 (% of LPNs who left a position)	2007 (% of LPNs who left a position)	2008 (% of LPNs who left a position)
a) take another nursing position in the same organization?	6.4%	6.9%	6.3%
b) take another nursing position with a different organization?	61.4	63.7	63.2
c) take a position outside of nursing?	10.9	9.1	7.8
d) retire/quit nursing?	21.4	20.3	22.6

18. If you voluntarily left a nursing position in the last two years, what were the factors that led to this decision? (Mark **all** that apply)

	2006 (% of LPNs who left a position)	2007 (% of LPNs who left a position)	2008 (% of LPNs who left a position)
a) Age	12.7%	11.7%	17.1%
b) General lack of job satisfaction	38.6	38.6	36.9
c) Childbearing/childrearing	5.4	5.4	4.2
d) Personal or family concerns	32.1	28.8	28.2
e) Increasing administrative burden	10.5	12.8	12.5
f) Physical demands of the job	22.7	23.0	21.3
g) Employer/employee conflict	15.7	15.0	14.4
h) Inadequate salary/wages	26.0	26.3	24.6
i) Inadequate benefits	19.3	18.0	16.3
j) Opportunity to work in nursing administration	1.8	2.2	2.1
k) Opportunity to work in nursing education	1.9	1.1	1.3
l) Career promotion	9.9	7.8	8.6