

Michigan Department of Community Health

Survey of Pharmacists

Survey Findings 2008

INTRODUCTION

In 2008, the Michigan Department of Community Health (MDCH) conducted the fourth annual survey of pharmacists licensed in Michigan to gather information about their employment characteristics, education, and work environment. A total of 6,721 pharmacists received the survey with their license renewal application. Pharmacists could either return the two-page paper version of the survey with their renewal or alternatively complete both the survey and their license renewal online. Combining the responses from the paper version with the results from the Web survey resulted in a final total of 2,293 returned surveys, yielding a margin of error of ± 1.6 percent with 95 percent confidence.¹

The sample for this survey was drawn from the Michigan licensure files maintained by the MDCH. The 2,293 responses include fully and partially completed surveys (i.e., some with information missing for one or more questions); 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.

The Michigan Department of Community Health contracted with Public Sector Consultants Inc. (PSC) for development, implementation, and analysis of the survey of pharmacists. The survey was designed in collaboration with the Michigan Pharmacists Association. The instrument contained questions about employment status, education and certifications, services offered at primary practice sites, professional satisfaction, and the length of time that the respondent intended to continue practicing, as well as a number of demographic questions (age, gender, race/ethnicity). The survey questions and response frequencies are provided in the Appendix.

As of January 2008, a total of 12,636 pharmacists are licensed in Michigan. All pharmacists are required to renew their license every two years after receiving their first license, which results in two approximately equal cohorts of pharmacists. This suggests that pharmacists who responded to the 2008 and 2007 surveys should have roughly the same characteristics as those who responded to the 2006 and 2005 surveys, respectively. However, respondents to the 2008 and 2007 surveys were considerably older than their 2006 and 2005 counterparts. To enable valid analysis and comparison to surveys conducted in previous years, the responses to the 2008 survey have been weighted by age to conform to the entire population of licensed pharmacists (as were the responses to the 2007 survey). It was not possible to adjust for demographic characteristics that may have been affected by the imbalance between online and paper surveys, e.g., gender.

¹ For example, if the answer to a survey question is 60 percent “Yes,” the margin of error and confidence level mean that if this question were asked 100 times, in 95 occurrences the answer of the entire universe of possible respondents would be between 58.4 percent and 61.6 percent (i.e., the ± 1.6 percent margin of error).

While the results of the 2008 survey of pharmacists are generally consistent with those of the 2005, 2006, and 2007 surveys, differences in the data that fall outside the margin of error are noted in this report. Key survey findings are presented below.

EMPLOYMENT CHARACTERISTICS

- About 90 percent of pharmacists licensed in Michigan are *active*—that is, they are working as a pharmacist full or part time. Analysis of data in this report focuses on active pharmacists.
- Only about 4 percent of licensed pharmacists are temporarily not working and not looking for a job; 3 percent are retired with no plans to return to work; and 4 percent are employed, but not in pharmacy.
- About 82 percent of active pharmacists are employed full time—30 or more hours per week.

EXHIBIT 1

Employment Characteristics of Pharmacists, 2008

	Percentage of all pharmacists	Percentage of active pharmacists
30 or more hours per week in pharmacy or related area	74%	82%
Fewer than 30 hours per week in pharmacy or related area	16	18
Employed, but not in pharmacy	4	NA
Not employed and seeking employment outside of pharmacy	<1	NA
Temporarily not working and not looking for a job	4	NA
Retired and not practicing with no plans to return to work	3	NA

SOURCE: Michigan Department of Community Health Survey of Pharmacists 2008.

NOTE: Percentages do not equal 100 percent due to rounding. NA = Not applicable.

PRACTICE SITE AND POSITION

The main practice site for almost all (98 percent) of the active pharmacists licensed in Michigan is in the United States. Thirty-five percent of active pharmacists, a plurality, are employed at a chain/mass merchandiser (see Exhibit 2). This is a smaller proportion than in any of the previous surveys (41 percent in 2005, 37 percent in 2006, and 39 percent in 2007). About 26 percent of active pharmacists are employed in a hospital/health system inpatient setting.

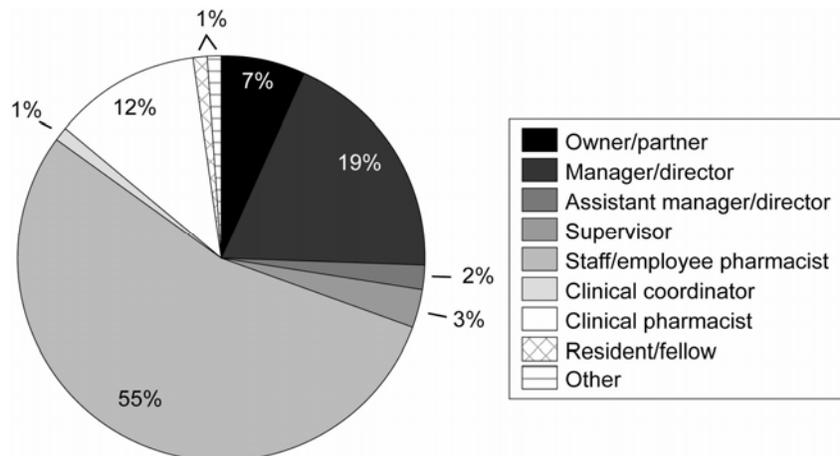
EXHIBIT 2
Primary Practice Site of Pharmacists, 2008

Primary practice site	Percentage of active pharmacists
Chain/mass merchandiser (>15 sites)	35%
Hospital/health system inpatient	26
Community independent (1 site)	12
Multi-unit community (2–14 sites)	7
Hospital/health system outpatient	7
Long-term care/nursing home/hospice	4
Pharmaceutical manufacturing (industry)	2
Pharmacy education/university	2
Home IV infusion/home health care	1
Managed care	1
Nuclear pharmacy	1
Temporary agency	1
Local or state government agency	<1
Other	1

SOURCE: Michigan Department of Community Health Survey of Pharmacists 2008.
NOTE: Percentages do not equal 100 percent due to rounding.

The majority of pharmacists (55 percent) are staff or employee pharmacists. About 7 percent of pharmacists are an owner/partner in their primary practice site; 19 percent are a manager/director (see Exhibit 3).

EXHIBIT 3
Positions of Active Pharmacists in Primary Practice Site, 2008



SOURCE: Michigan Department of Community Health Survey of Pharmacists 2008.
NOTE: Percentages do not equal 100 percent due to rounding.

PHARMACY SERVICES OFFERED

About 80 percent of pharmacists report that they provide direct care or counsel to their patients at their primary practice site. Pharmacists also were asked to identify from a list of services the types of services offered at their primary practice site (see Exhibit 4). The service identified most often (67 percent) among the choices offered was “drug information service.”

EXHIBIT 4

Pharmacy Services Offered at Primary Practice Site of Active Pharmacists, 2008

Pharmacy service offered	Percentage of active pharmacists
Drug information service	67%
Pharmacokinetic dosing	31
Immunizations	31
Diabetes management	26
Anticoagulation services	25
Specialty/complex compounding	24
Nutritional support	23
Smoking cessation	20
Health screening	19
Pain management	18

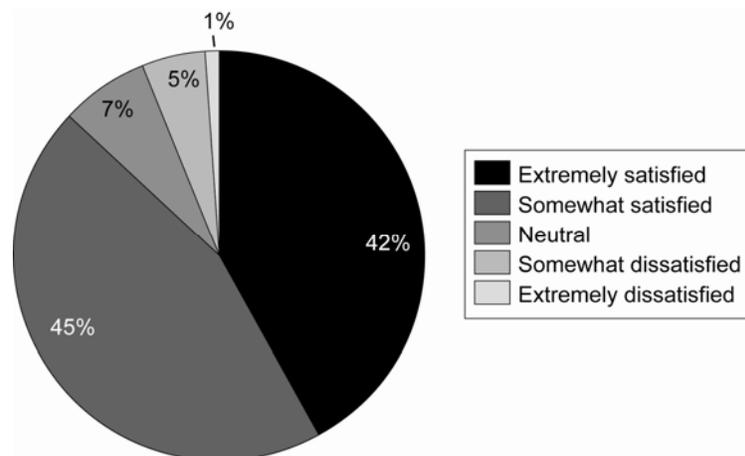
SOURCE: Michigan Department of Community Health Survey of Pharmacists 2008.

PROFESSIONAL SATISFACTION

When asked to rate their overall professional satisfaction as a pharmacist, 42 percent of pharmacists report that they are extremely satisfied; another 45 percent are somewhat satisfied (see Exhibit 5).

EXHIBIT 5

Professional Satisfaction of Active Pharmacists, 2008

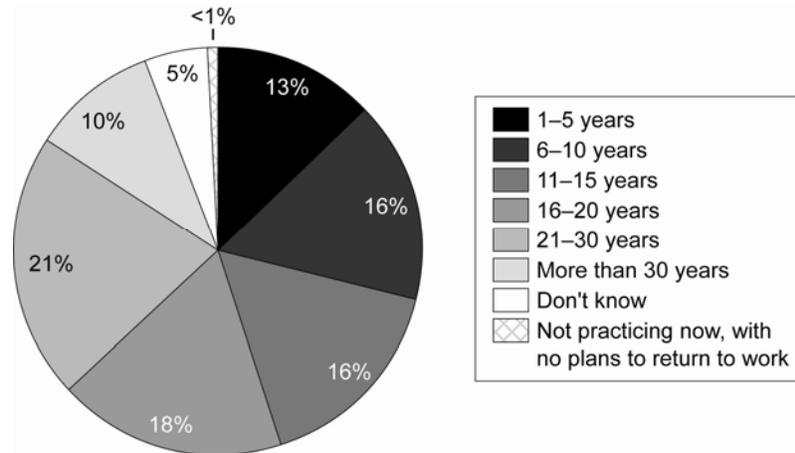


SOURCE: Michigan Department of Community Health Survey of Pharmacists 2008.

PLANS TO CONTINUE PRACTICE

Twenty-nine percent of active pharmacists indicate that they only plan to practice pharmacy for one to ten more years (see Exhibit 6).

EXHIBIT 6
Plans of Active Pharmacists to Continue Practicing, 2008



SOURCE: Michigan Department of Community Health Survey of Pharmacists 2008.
NOTE: Percentages do not equal 100 percent due to rounding.

EDUCATION AND CERTIFICATION CREDENTIALS

Pharmacists responding to the survey were asked whether they received their first pharmacy degree in Michigan, another state, or another country. They also were asked to indicate their highest degree achieved and select their certification credentials from a list of choices (see Exhibit 7). Among active pharmacists:

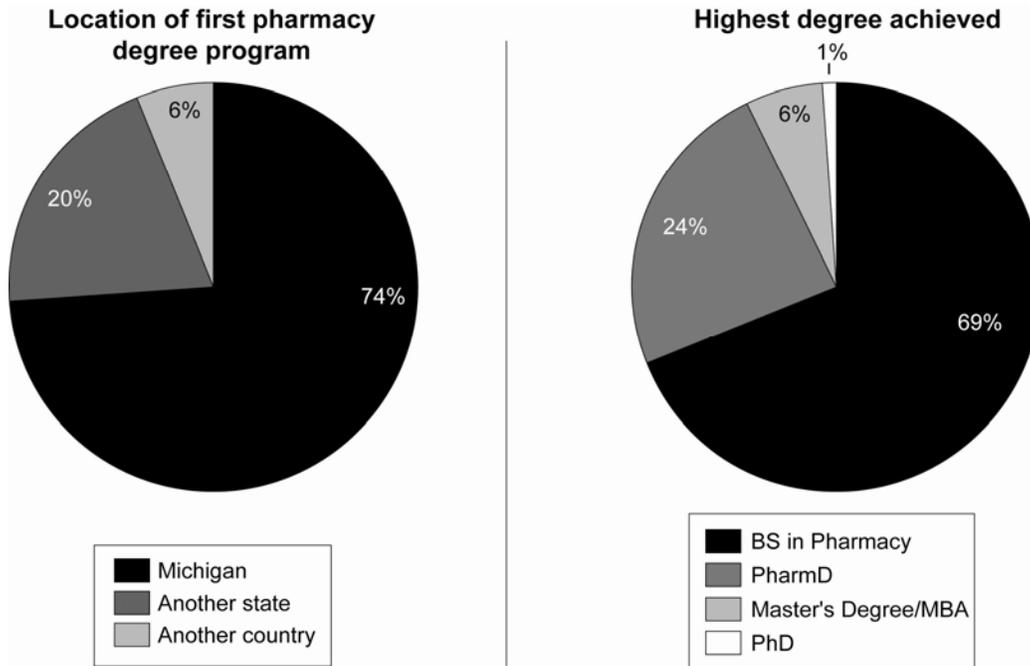
- Nearly three out of four (74 percent) received their first pharmacy degree from a program in Michigan; 20 percent received their first degree from a program in another state; and 6 percent received their first degree in another country.
- Approximately 69 percent have a Bachelor of Science in Pharmacy.
- About 24 percent have a PharmD.² This is higher than the percentage of active pharmacists who reported having a PharmD in 2005 and 2006 (18 percent and 20 percent, respectively).
- Six percent hold a master's degree and/or master of business administration (MBA) degree, and 1 percent hold a doctorate (PhD).
- Three percent hold certification credentials as a board certified pharmacotherapy specialist. Two percent are certified geriatric pharmacists. One percent or fewer hold certification credentials in the other areas listed: certified diabetes educator, certified

² The PharmD degree (Doctor of Pharmacy) is neither an undergraduate degree (e.g., BS, BA) nor a graduate degree (e.g., MS, MBA, PhD), but rather an entry-level professional degree for pharmacists. After completing the required prerequisite classes (a minimum of two years), the course of study includes four years of professional coursework. This coursework prepares students for the general practice of pharmacy, providing them with the competencies necessary to deliver pharmaceutical care in any pharmacy practice setting.

disease manager, board certified nuclear pharmacist, board certified nutrition support pharmacist, board certified oncology pharmacist, and board certified psychiatric pharmacist.

EXHIBIT 7

Education Background of Active Pharmacists, 2008

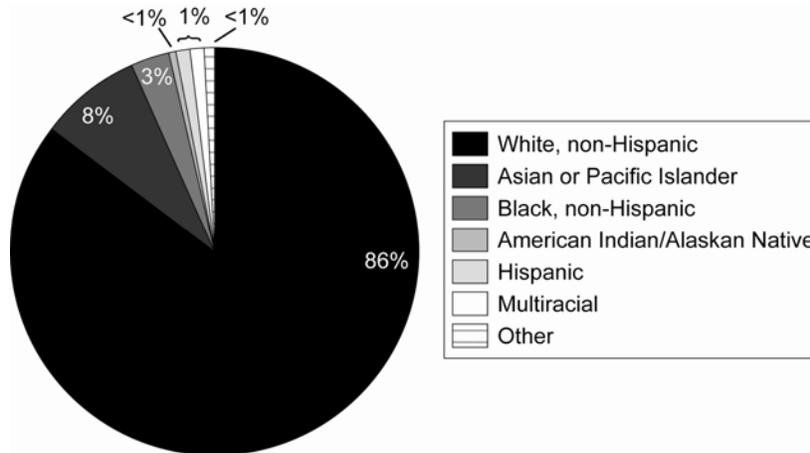


SOURCE: Michigan Department of Community Health Survey of Pharmacists 2008.

RACE AND ETHNICITY

- Eighty-six percent of *active* pharmacists are white, 8 percent are Asian or Pacific Islander, 3 percent are African American, 1 percent are Hispanic, and less than 1 percent are American Indian/Alaskan Native (see Exhibit 8).

EXHIBIT 8
Race and Ethnicity of Active Pharmacists in Michigan, 2008



SOURCE: Michigan Department of Community Health Survey of Pharmacists 2008.
NOTE: Percentages do not equal 100 percent due to rounding.

Appendix

Survey Questions and Response Frequencies^{*} (N=2,293)

This survey was designed by the Michigan Pharmacists Association to gather information about the employment, education, and work environment of pharmacists in Michigan. The information you provide will be confidential; the identity of individual respondents will not be shared with anyone. Completion of the survey below is voluntary and does not affect your license. The information is important, however, 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 renew your license via the Internet, you will have the opportunity to complete this survey online.

1. In what year were you born?

Age	2005	2006	2007	2008
<25	6%	<1%	—	—
25–34	17	21	—	—
35–44	25	26	—	—
45–54	31	28	—	—
55–64	15	18	—	—
65+	6	7	—	—

Note: Respondents to the 2008 and 2007 surveys were considerably older than their 2006 and 2005 counterparts. To enable valid analysis and comparison to surveys conducted in previous years, the responses to the 2008 survey have been weighted by age to conform to the entire population of licensed pharmacists (as were the responses to the 2007 survey). Frequencies for all other variables for 2007 and 2008 have been adjusted for age based on the age distribution of all licensed pharmacists in the licensure file maintained by the Michigan Department of Community Health.

2. What is the highest degree you have achieved? (Check **one**)

	2005	2006	2007	2008
BS in Pharmacy	74%	71%	68%	69%
PharmD	18	20	24	24
Master's Degree/MBA	8	8	7	6
PhD	1	1	1	1

^{*}All frequencies are for the pharmacists who indicated they are “active,” working as a pharmacist full or part time.

3. What is your current employment status? (Check **one**)

	Percentage of all licensed pharmacists			
	2005	2006	2007	2008
30 or more hours per week in pharmacy or related area	78%	76%	77%	74%
Less than 30 hours per week in pharmacy or related area	13	15	16	16
Employed, but not in pharmacy	3	3	3	4
Not employed and seeking employment outside of pharmacy	<1	1	<1	<1
Temporarily not working and not looking for a job	3	3	3	4
Retired and not practicing with no plans to return to work	2	2	3	3

4. Identify your current primary practice site. (Check **one**)

	2005	2006	2007	2008
None (not active in pharmacy) Skip to 11	0%	<1%	<1%	<1%
Hospital/health system inpatient	24	25	26	26
Hospital/health system outpatient	5	6	5	7
Community independent (1 site)	10	11	12	12
Multi-unit community (2–14 sites)	6	7	7	7
Chain/mass merchandiser (>15 sites)	41	37	39	35
Long-term care/nursing home/hospice	3	3	3	4
Home IV infusion/home health care	3	2	2	1
Local or state government agency	1	1	<1	<1
Pharmacy education/university	2	2	2	2
Pharmaceutical manufacturing (industry)	2	2	2	2
Managed care	2	2	2	1
Temporary agency	1	<1	<1	1
Nuclear pharmacy	1	1	1	1
Other:	2	1	1	1

5. Is your primary practice site in a supermarket or grocery store?

	2005	2006	2007	2008
Yes	15%	14%	14%	12%
No	85	86	86	88

6. For your primary practice site, which of the following best describes your position?
(Choose **only one**)

	2005	2006	2007	2008
Owner/partner	6%	6%	7%	7%
Manager/director	23	21	20	19
Assistant manager/director	2	2	2	2
Supervisor	3	3	3	3
Staff/employee pharmacist	54	54	55	55
Clinical coordinator	1	1	1	1
Clinical pharmacist	9	10	11	12
Resident/fellow	1	1	1	1
Other:	1	1	1	1

7. Do you (as an individual pharmacist) provide direct care or counsel to your patients at your primary practice site?

	2005	2006	2007	2008
Yes	80%	81%	79%	80%
No	20	19	21	20

8. Which of the following services are offered at your primary practice site? (Check **all** that apply)

	2005	2006	2007	2008
Specialty/complex compounding	30%	27%	32%	24%
Drug information service	69	69	71	67
Home infusion	9	8	10	8
Immunizations	19	23	31	31
Health screening	20	21	27	19
Smoking cessation	19	19	26	20
Nutritional support	25	24	29	23
Pharmacokinetic dosing	29	30	36	31
Anticoagulation services	20	22	25	25
Diabetes management	27	26	29	26
Dyslipidemia management	12	13	16	12
Hypertension management	15	15	18	16
Asthma/COPD management	12	13	15	11
Osteoporosis screening/management	8	9	12	8
Pain management	18	18	23	18
Weight management	6	7	9	8
Other:	2	2	7	

9. Is your primary practice site in the United States?

	2005	2006	2007	2008
Yes	97%	98%	98%	98%
No	3	2	2	2

10. What is the ZIP code of your primary practice site? _____

11. Did you graduate from a pharmacy program in Michigan, in another state, or in another country? (Please check where you received your **first** pharmacy degree)

	2005	2006	2007	2008
Michigan	73%	73%	73%	74%
Another state	21	21	21	20
Another country	6	6	6	6

12. Do you hold any of the following certification credentials? (Check **all** that apply)

	2005	2006	2007	2008
Certified diabetes educator (CDE)	2%	2%	2%	1%
Certified disease manager (NIPCO)	1	1	1	1
Certified geriatric pharmacist	1	2	2	2
Board certified nuclear pharmacist	0	1	1	<1
Board certified nutrition support pharmacist	1	1	1	<1
Board certified oncology pharmacist	0	1	<1	<1
Board certified pharmacotherapy specialist	1	3	2	3
Board certified psychiatric pharmacist	0	1	<1	<1

13. Do you live in the United States?

	2005	2006	2007	2008
Yes	97%	97%	97%	97%
No	3	3	4	3

14. Overall, how would you rate your professional satisfaction as a pharmacist?

	2005	2006	2007	2008
Extremely satisfied	43%	43%	42%	42%
Somewhat satisfied	44	43	46	45
Neutral	8	8	7	7
Somewhat dissatisfied	5	5	5	5
Extremely dissatisfied	1	1	1	1

15. What is your gender?

	2005	2006	2007	2008
Male	54%	55%	--	--
Female	46	45	--	--

Note: The 2007 and 2008 survey samples were not as robust and representative as surveys in previous years, and gender data may have been affected by the imbalance between online and paper surveys.

16. What is your race/ethnicity?

	2005	2006	2007	2008
American Indian/Alaskan Native	1%	1%	<1%	<1%
Asian or Pacific Islander	10	9	8	8
Black, non-Hispanic	4	3	4	3
Hispanic	1	1	1	1
White, non-Hispanic	83	84	85	86
Multiracial	1	1	1	1
Other	1	1	<1	<1

17. To assist us in projecting the supply of pharmacists in the future, please tell us how much longer you plan to practice pharmacy.

	2005	2006	2007	2008
1–5 years	10%	12%	12%	13%
6–10 years	16	17	16	16
11–15 years	19	18	17	16
16–20 years	20	18	16	18
21–30 years	20	20	20	21
More than 30 years	10	10	9	10
Don't know	5	5	6	5
Not practicing now, with no plans to return to work	0	<1	4	<1

Thank you!