

Michigan Department of Community Health

Survey of Pharmacists 2007

INTRODUCTION

In 2007, the Michigan Department of Community Health (MDCH) conducted the third annual survey of pharmacists licensed in Michigan to gather information about their employment characteristics, education, and work environment. A total of 6,417 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 2,575 returned surveys, yielding a margin of error of ± 2.0 percent with 95 percent confidence.

As of January 2007, a total of 12,349 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. Pharmacists who responded to the 2007 survey should have roughly the same characteristics as those who responded to the 2005 survey. However, respondents to the 2007 survey were considerably older than respondents to the 2005 survey. This discrepancy appears to be due to the fact that the proportion of responses received online was much lower in 2007 than it had been in 2005. A comparison of responses received online and by return mail confirmed that those who responded by return mail were, on average, much older than those who responded online. To enable valid analysis and comparison to surveys conducted in previous years, the responses to the 2007 survey have been weighted by age to conform to the entire population of licensed pharmacists. It was not possible to adjust for other demographic characteristics that may have been affected by the imbalance between online and paper surveys, e.g., gender.

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

METHODOLOGY

The Michigan Department of Community Health (MDCH) 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.

The sample for this survey was drawn from the Michigan licensure files maintained by the MDCH. The 2,575 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.

EMPLOYMENT CHARACTERISTICS

- About 92 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 3 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 3 percent are employed, but not in pharmacy.
- About 84 percent of active pharmacists are employed full time—30 or more hours per week.

EXHIBIT 1
Employment Characteristics of Pharmacists, 2007

	Percentage of all pharmacists	Percentage of active pharmacists only
30 or more hours per week in pharmacy or related area	77%	84%
Fewer than 30 hours per week in pharmacy or related area	15	16
Employed, but not in pharmacy	3	—
Not employed and seeking employment outside of pharmacy	<1	—
Temporarily not working and not looking for a job	3	—
Retired and not practicing with no plans to return to work	3	—

SOURCE: Michigan Department of Community Health Survey of Pharmacists 2007. NOTE: Percentages do not equal 100 percent due to rounding.

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-nine percent of active pharmacists, the largest percentage among those responding, are employed at a chain/mass merchandiser. About 14 percent of pharmacists report that their primary practice site is located in a supermarket or grocery store. About 26 percent of active pharmacists are employed in a hospital/health system inpatient setting (see Exhibit 2).

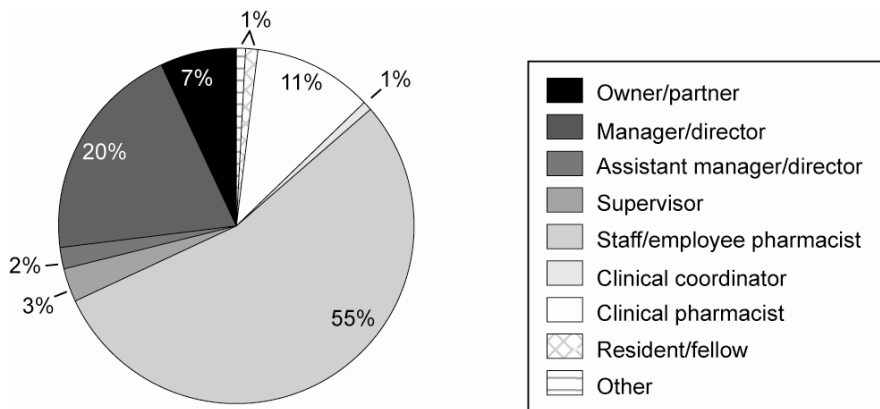
EXHIBIT 2
Primary Practice Site of Pharmacists, 2007

Primary practice site	Percentage of active pharmacists
Chain/mass merchandiser (>15 sites)	39%
Hospital/health system inpatient	26
Community independent (1 site)	12
Multi-unit community (2–14 sites)	7
Hospital/health system outpatient	5
Long-term care/nursing home/hospice	3
Home IV infusion/home health care	2
Pharmaceutical manufacturing (industry)	2
Managed care	2
Pharmacy education/university	2
Nuclear pharmacy	1
Local or state government agency	<1
Temporary agency	<1
Other	1

SOURCE: Michigan Department of Community Health Survey of Pharmacists 2007.
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; 20 percent are a manager/director (see Exhibit 3).

EXHIBIT 3
Position of Pharmacist in Primary Practice Site, 2007



SOURCE: Michigan Department of Community Health Survey of Pharmacists 2007.
NOTE: Percentages do not equal 100 percent due to rounding.

PHARMACY SERVICES OFFERED

About 79 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 out of the choices offered was “drug information service”; 71 percent of pharmacists report that this service is offered at their primary practice site. It appears that a greater proportion of pharmacies are offering services beyond dispensing medication, as shown in Exhibit 4, which compares responses from the 2005 and 2007 surveys.

EXHIBIT 4

Pharmacy Services Offered at Primary Practice Site, 2005 and 2007

Pharmacy service offered	Percentage of active pharmacists	
	2005	2007
Drug information service	69%	71%
Pharmacokinetic dosing	29	36*
Specialty/complex compounding	30	32
Immunizations	19	31*
Nutritional support	25	29*
Diabetes management	27	29
Health screening	20	27*
Smoking cessation	19	26*
Anticoagulation services	20	25*
Pain management	18	23*

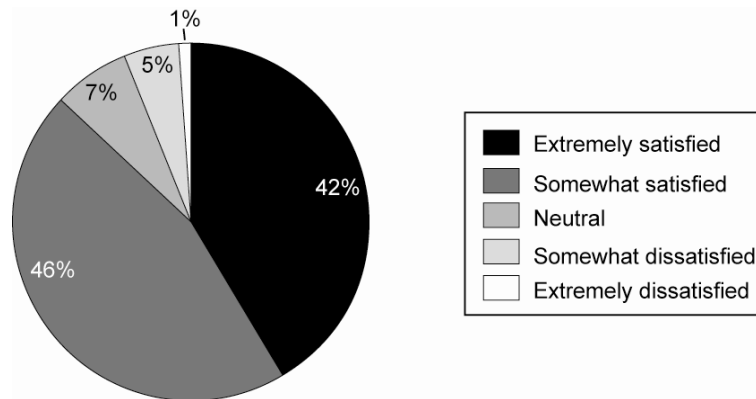
SOURCE: Michigan Department of Community Health Survey of Pharmacists 2005 and 2007.

* Denotes statistically significant increase from 2005.

PROFESSIONAL SATISFACTION

When asked to rate their overall professional satisfaction as a pharmacist, 42 percent of pharmacists report that they are extremely satisfied; another 46 percent are somewhat satisfied (see Exhibit 5).

EXHIBIT 5
Active Pharmacists' Professional Satisfaction, 2007

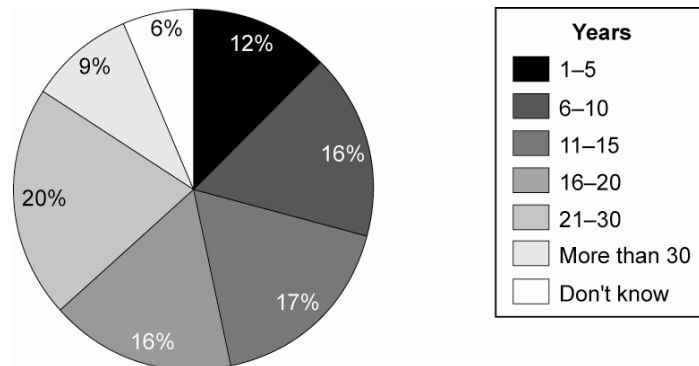


SOURCE: Michigan Department of Community Health Survey of Pharmacists 2007.
NOTE: Percentages do not equal 100 percent due to rounding.

PLANS TO CONTINUE PRACTICE

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

EXHIBIT 6
Active Pharmacists' Plans to Continue Practicing, 2007



SOURCE: Michigan Department of Community Health Survey of Pharmacists 2007.

EDUCATION AND CERTIFICATION CREDENTIALS

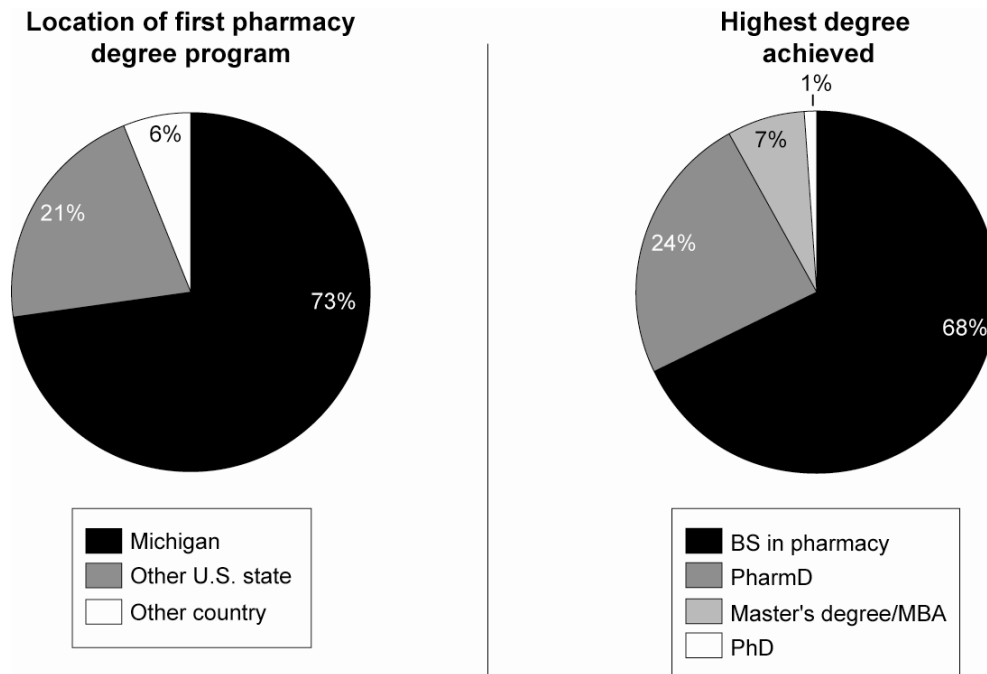
Pharmacists responding to the survey were asked whether they received their first pharmacy degree in Michigan, another state, or another country. They also were asked to indicate their highest degree achieved and select their certification credentials from a list of choices (see Exhibit 7).

- Seventy-three percent of active pharmacists received their first pharmacy degree from a program in Michigan; 21 percent received their first degree from a program in another state; and 6 percent received their first degree in another country.

- Approximately 68 percent of active pharmacists have a Bachelor of Science in Pharmacy. This is lower than the percentage of active pharmacists who reported having a BS in Pharmacy in 2005 (74 percent).
- About 23 percent of active pharmacists have a PharmD.¹ This is higher than the percentage of active pharmacists who reported having a PharmD in 2005 (18 percent).
- Seven percent of active pharmacists hold a master's degree and/or master of business administration (MBA) degree, and 1 percent hold a doctorate (PhD).
- Two percent of active pharmacists hold certification credentials as a board certified pharmacotherapy specialist, certified diabetes educator, or certified geriatric pharmacist. One percent or fewer hold certification credentials in the other areas listed: certified 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, 2007



SOURCE: Michigan Department of Community Health Survey of Pharmacists 2007.
 NOTE: Data presented are for *active* pharmacists licensed in Michigan.

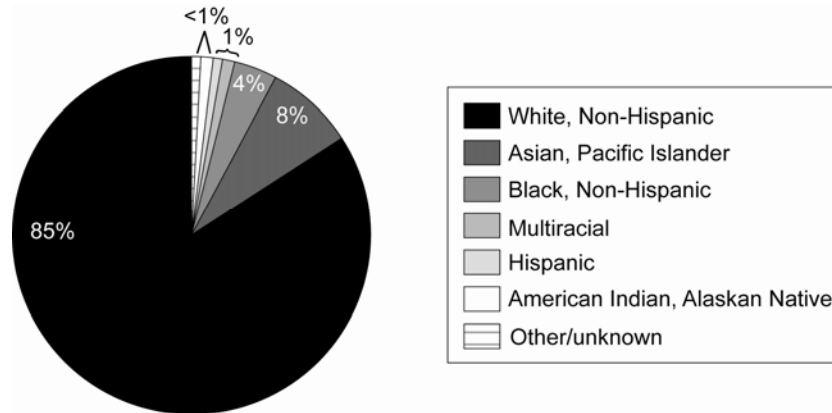
¹ The PharmD degree (Doctor of Pharmacy) is neither an undergraduate degree (e.g., BS, BA) nor a graduate degree (e.g., MS, MBA, PhD), but rather an entry-level professional degree for pharmacists. After completing the required prerequisite classes (a minimum of two years), the course of study includes 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.

AGE, RACE, AND ETHNICITY

- Age data obtained from MDCH pharmacist licensure files show us that twenty-six percent of all pharmacists licensed in Michigan are aged 55 or older.
- Eighty-five percent of *active* pharmacists are white, 8 percent are Asian or Pacific Islander, 4 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, 2007



SOURCE: Michigan Department of Community Health Survey of Pharmacists 2007.

NOTE: Data presented are for *active* pharmacists licensed in Michigan. Percentages may not equal 100 percent due to rounding.

Appendix

*Survey Questions and Response Frequencies** (N=2,575)

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?

Note: Frequencies for all other variables 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**)

BS in Pharmacy	68%
PharmD	24
Master's Degree/MBA	7
PhD	1

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

30 or more hours per week in pharmacy or related area	84%
Less than 30 hours per week in pharmacy or related area	16
Employed, but not in pharmacy	only active pharmacists
Not employed and seeking employment outside of pharmacy	
Temporarily not working and not looking for a job	
Retired and not practicing with no plans to return to work	

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

None (not active in pharmacy) Skip to 11	<1%
Hospital/health system inpatient	26
Hospital/health system outpatient	5
Community independent (1 site)	11
Multi-unit community (2–14 sites)	7
Chain/mass merchandiser (>15 sites)	39

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

Long-term care/nursing home/hospice	3
Home IV infusion/home health care	2
Local or state government agency	<1
Pharmacy education/university	2
Pharmaceutical manufacturing (industry)	2
Managed care	2
Temporary agency	<1
Nuclear pharmacy	1
Other:	1

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

Yes	14%
No	86

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

Owner/partner	7%
Manager/director	20
Assistant manager/director	2
Supervisor	3
Staff/employee pharmacist	55
Clinical coordinator	1
Clinical pharmacist	11
Resident/fellow	1
Other:	1

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

Yes	79%
No	21

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

Specialty/complex compounding	32%
Drug information service	71
Home infusion	10
Immunizations	31
Health screening	27
Smoking cessation	26
Nutritional support	29
Pharmacokinetic dosing	36

Anticoagulation services	25
Diabetes management	29
Dyslipidemia management	16
Hypertension management	18
Asthma/COPD management	15
Osteoporosis screening/management	12
Pain management	23
Weight management	9
Other:	7

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

Yes	98%
No	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)

Michigan	73%
Another state	21
Another country	6

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

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

13. Do you live in the United States?

Yes	97%
No	3

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

Extremely satisfied	42%
Somewhat satisfied	46
Neutral	7

Somewhat dissatisfied	5
Extremely dissatisfied	1

15. What is your gender?

Note: The 2007 survey sample was 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?

American Indian/Alaskan Native	<1%
Asian or Pacific Islander	8
Black, non-Hispanic	4
Hispanic	1
White, non-Hispanic	85
Multiracial	1
Other	<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.

1–5 years	12%
6–10 years	16
11–15 years	17
16–20 years	16
21–30 years	20
More than 30 years	9
Don't know	6
Not practicing now, with no plans to return to work	4

Thank you!