

Iowa Pharmacist Tracking System Advisory Committee Meeting

February 8, 2024

Meeting Agenda & Participant List

Iowa Pharmacist Tracking System
Advisory Committee Meeting
Thursday February 8, 2024
9:00 A.M. – 11:00 A.M.

Iowa Health Professions Tracking Center
Office of Statewide Clinical Education Programs
UI Carver College of Medicine, April 2023

— **Agenda** —

- Welcome and Introductions
- Meeting Agenda and Participant List
- 2022 Annual Report
 - Annual Benchmarks
 - Geographic Distribution
 - Trends
 - Workforce Summary
- Open Discussion Items

Iowa Pharmacist Tracking System
Advisory Committee Meeting
Thursday February 8, 2024
9:00 A.M. – 11:00 A.M.

Advisory Committee

Michael Andreski, RPh, PhD

Associate Professor of Social and Administrative Pharmacy
Drake University College of Pharmacy and Health Sciences

Jay D. Currie, BS Pharm, PharmD, FCCP, FAPhA

Clinical Professor, Applied Clinical Sciences

Chair Department of Pharmacy Practice and Sciences

University of Iowa College of Pharmacy

Barbara Kelley, BBA, BA

Strategic Communication Director

University of Iowa College of Pharmacy

Emmeline Paintsil, PharmD, MSLD, BCPS

Directory of Professional Affairs

Iowa Pharmacy Association

Therese (Terry) Witkowski

Executive Officer

Iowa Board of Pharmacy Examiners

Iowa Pharmacist Tracking System
Advisory Committee Meeting
Thursday February 8, 2024
9:00 A.M. – 11:00 A.M.

Iowa Health Professions Tracking Center

Greg Nelson, Assistant Dean
Director for Statewide Clinical Education Programs
Director for Continuing Medical Education

Linda Thiesen
Interim Assistant Director for Statewide Clinical Education Programs
Data Analyst/Physicians and Physicians Assistants

Nibras Elnour
Data Analyst/Pharmacy, ARNP, and VCC

Austin Snyder
Data Analyst/ Dentistry

Annual Benchmarks

IOWA PHARMACISTS

Annual Workforce Report

2022

<u>Date</u>	<u>Pharmacists</u>
• December 2022	3048
• January 2022	<u>-3083</u>
Net Gain/Loss	-35

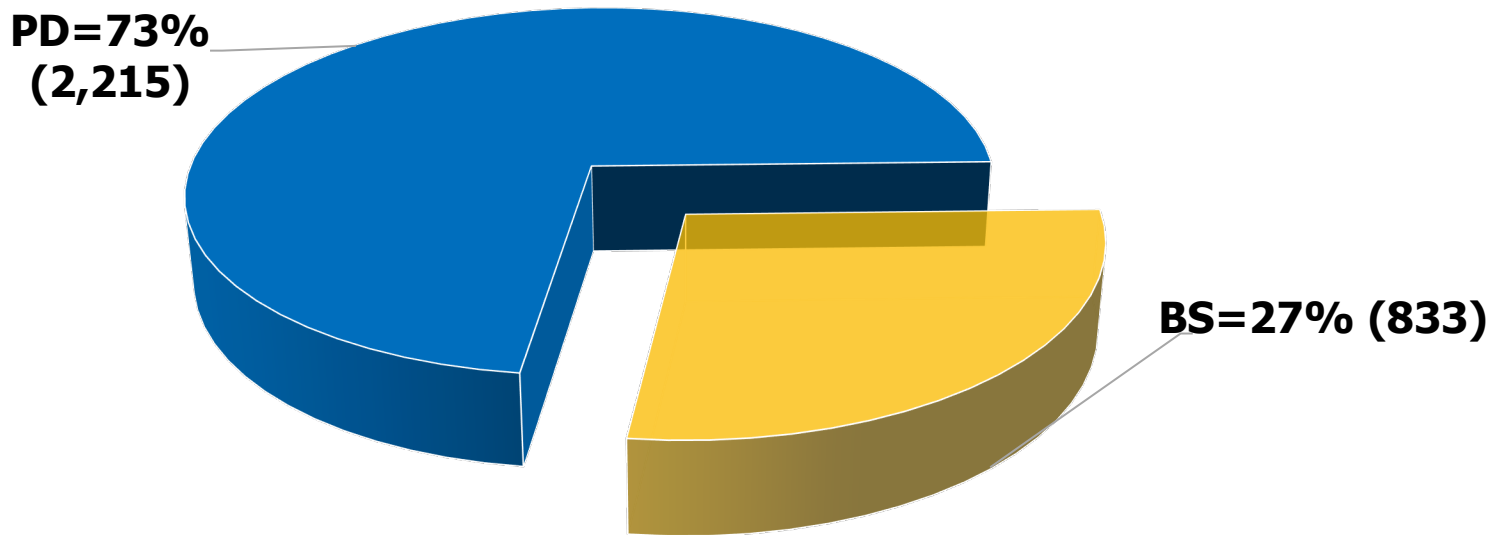
IOWA PHARMACISTS

Entering vs. Terminating Practice

2022

	<u>2022</u>	<u>Prior Year</u>	<u>Prior Ten-Year Average</u>
Pharmacists Entering	87	227	188
Pharmacists Terminating	<u>-122</u>	<u>-232</u>	<u>-167</u>
Net Gain/Loss	-35	-5	+21

IOWA PHARMACISTS Pharmacy Degree 2022



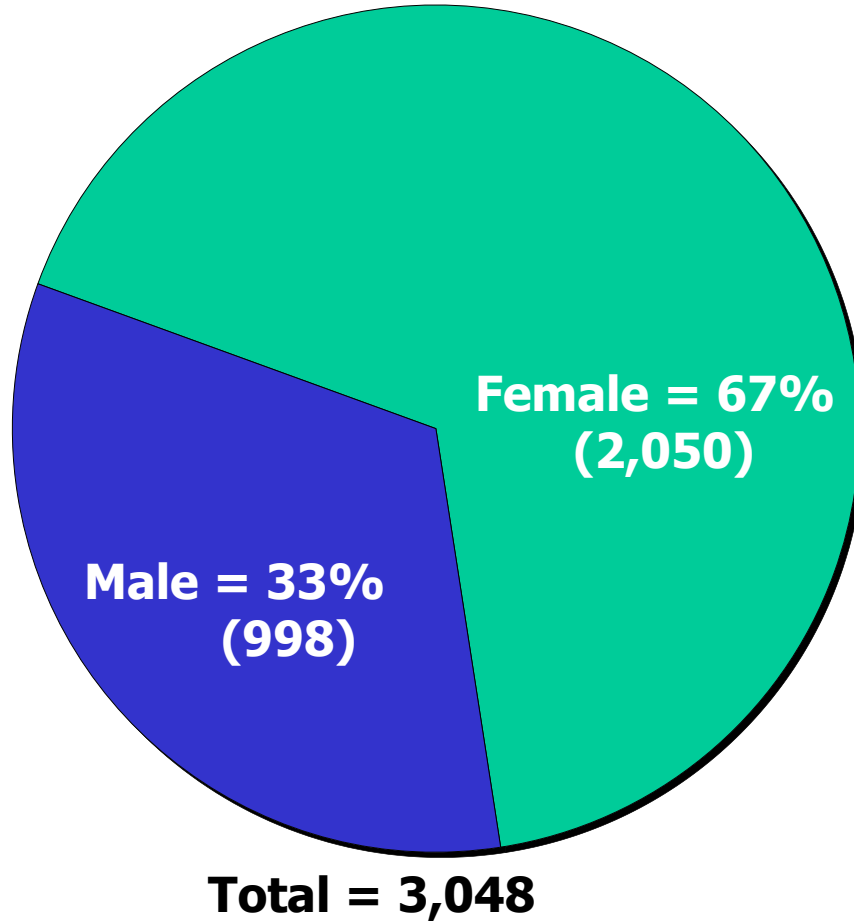
■ Pharm D ■ BS

Total = 3,048

IOWA PHARMACISTS

Gender

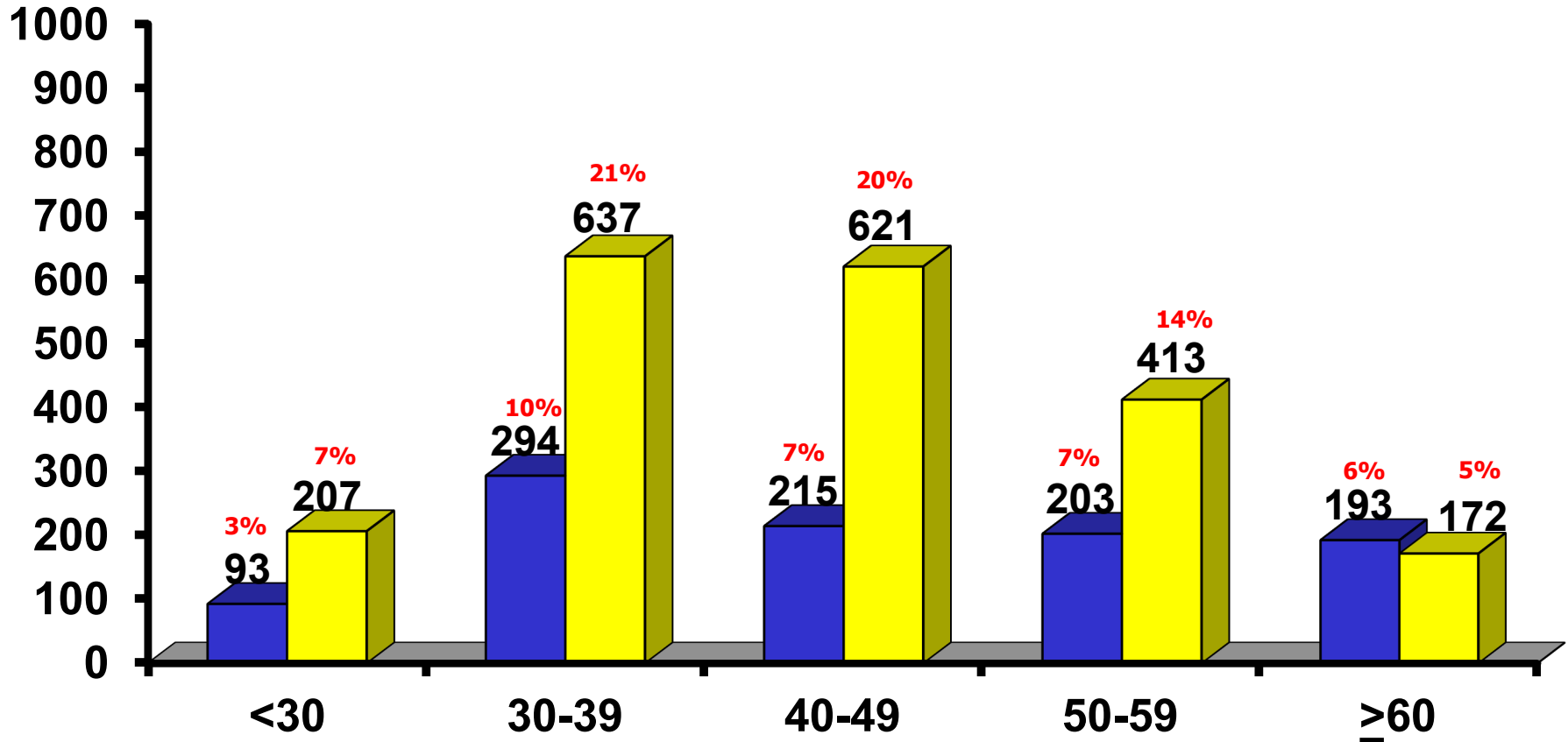
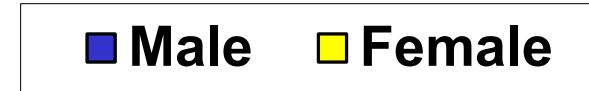
2022



AGE DISTRIBUTION OF IOWA PHARMACISTS

GENDER

2022



IOWA PHARMACISTS

Full-Time vs. Part-Time

Gender

2022

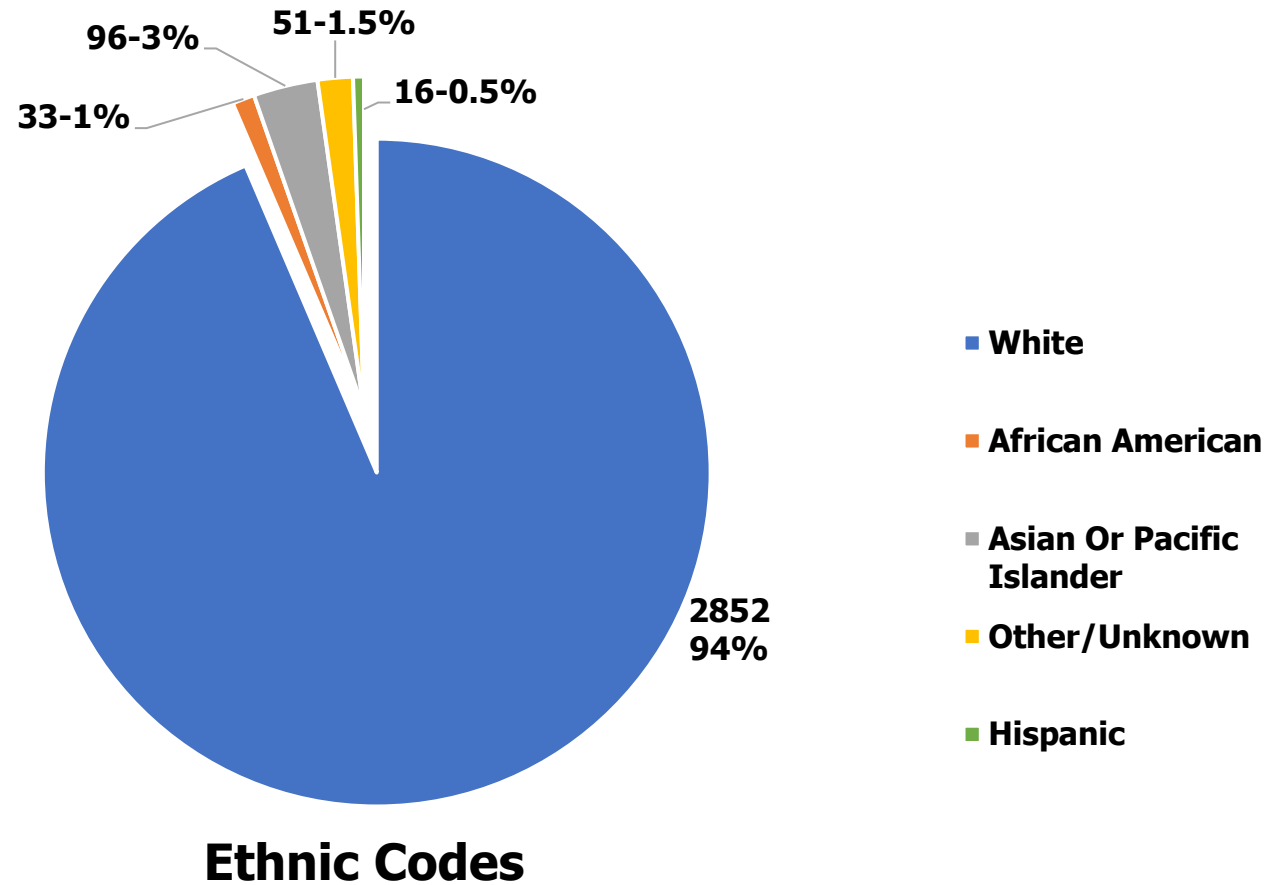
	Full-Time*		Part-Time	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Male	914	29.9%	84	2.8%
Female	<u>1724</u>	<u>56.6%</u>	<u>326</u>	<u>10.7%</u>
Total	2638	86.5%	410	13.5%

***FT ≥ 30 hours/week**

IOWA PHARMACISTS

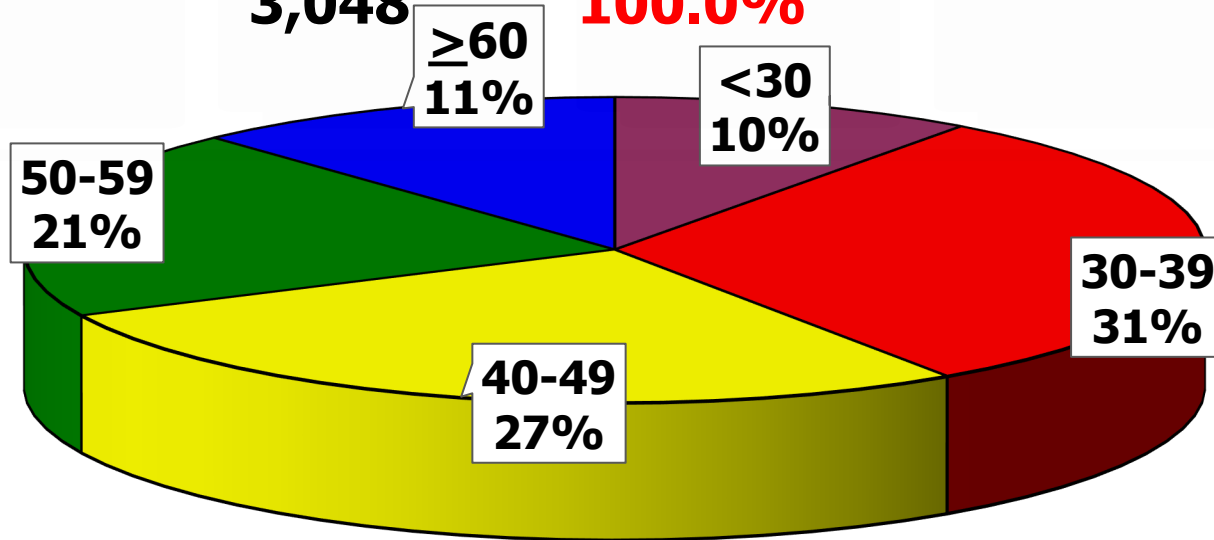
Ethnic Codes

2022



AGE DISTRIBUTION OF IOWA PHARMACISTS 2022

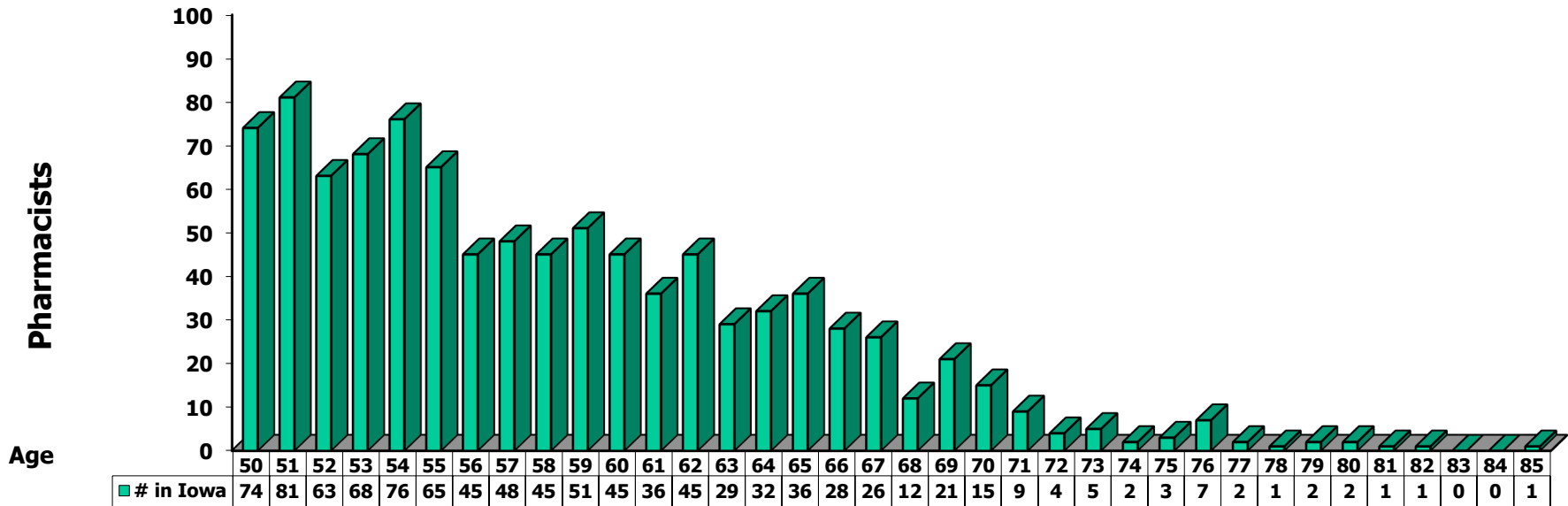
<u>Age Category</u>	<u>Number</u>	<u>Percent</u>	<u>Cumulative %</u>
< 30	300	10.0	10.0%
30-39	931	30.5	40.5
40-49	836	27.4	67.9
50-59	616	20.2	88.1
≥ 60	<u>365</u>	<u>11.9</u>	100.0%
	3,048	100.0%	



IOWA PHARMACISTS

Detail of Age \geq 50

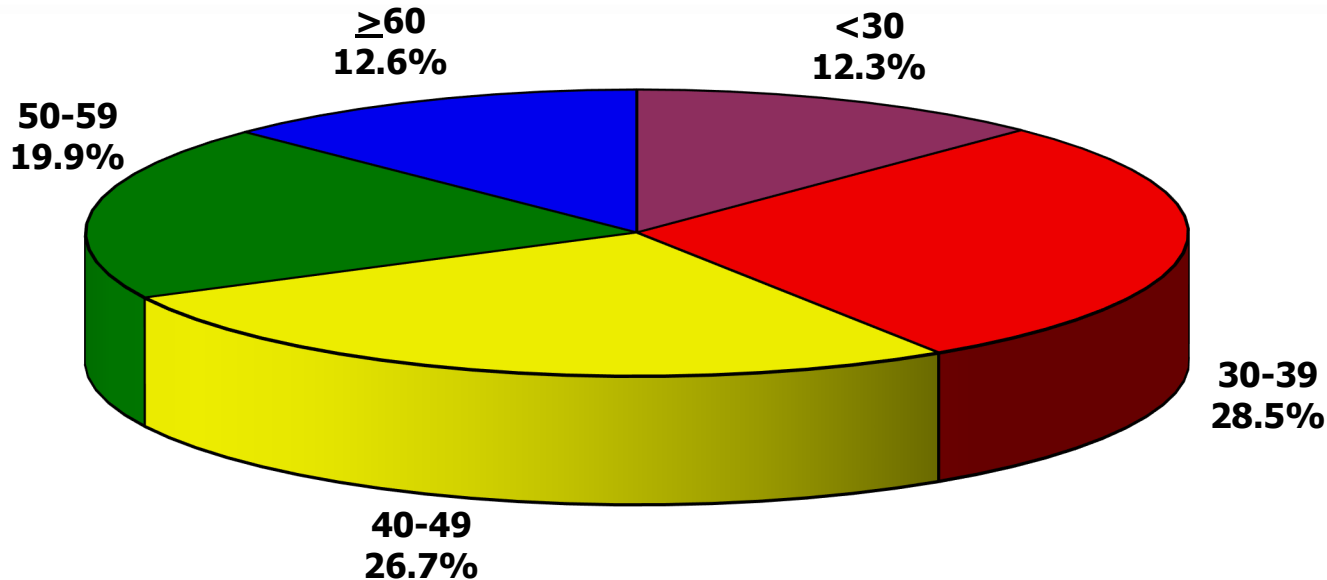
2022



Total number of pharmacists 50 years of age and older = 981 (32%)

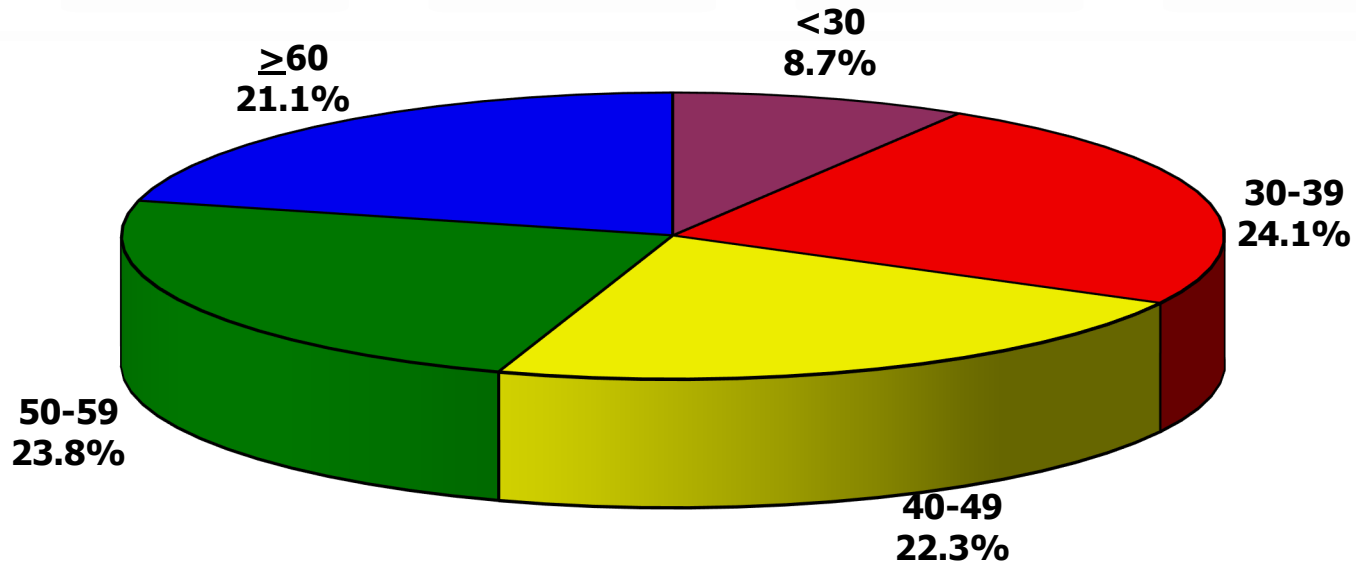
AGE DISTRIBUTION OF IOWA COMMUNITY PHARMACISTS 2022

<u>Age Category</u>	<u>Number</u>	<u>Percent</u>	<u>Cumulative %</u>
< 30	203	12.3%	12.3%
30-39	471	28.5	40.8
40-49	441	26.7	67.5
50-59	328	19.9	87.4
≥ 60	<u>208</u>	<u>12.6</u>	<u>100.0 %</u>
	1651	100.0 %	



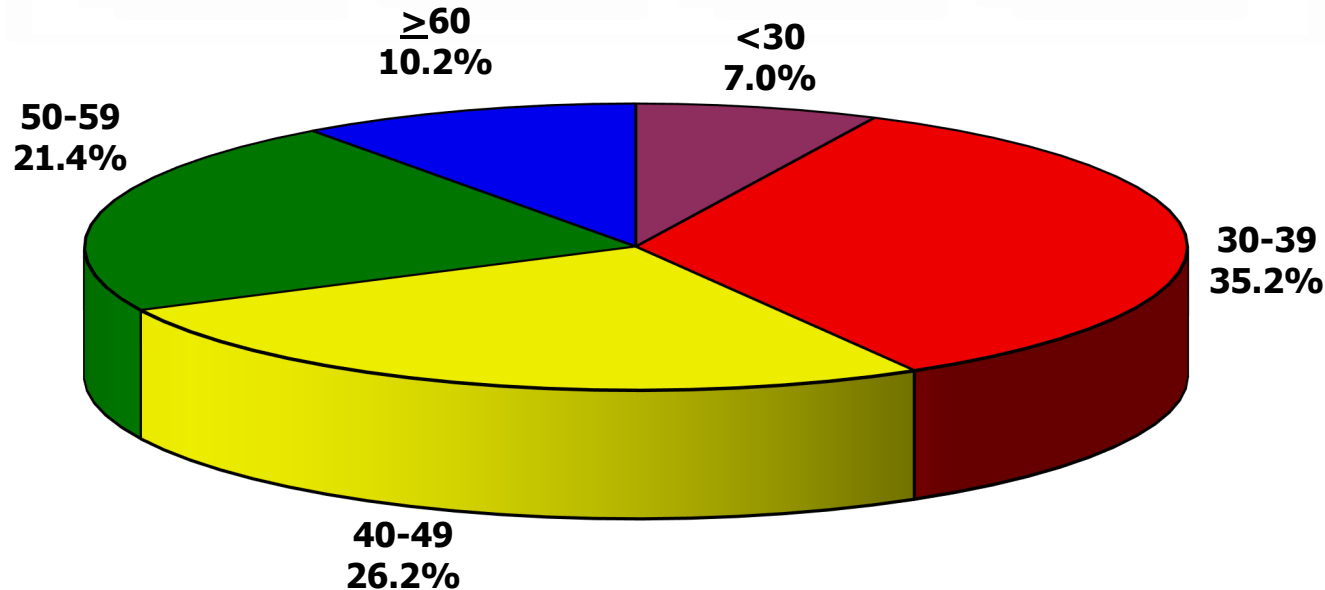
AGE DISTRIBUTION OF IOWA INDEPENDENT PHARMACISTS 2022

<u>Age Category</u>	<u>Number</u>	<u>Percent</u>	<u>Cumulative %</u>
< 30	28	8.7%	8.7%
30-39	78	24.1	32.8
40-49	72	22.3	55.1
50-59	77	23.8	78.9
≥ 60	<u>68</u>	<u>21.1</u>	100.0 %
	323	100.0 %	



AGE DISTRIBUTION OF IOWA HOSPITAL PHARMACISTS 2022

<u>Age Category</u>	<u>Number</u>	<u>Percent</u>	<u>Cumulative %</u>
< 30	60	7.0%	7.0%
30-39	303	35.2	42.2
40-49	226	26.2	68.4
50-59	184	21.4	89.8
≥ 60	88	10.2	100.0 %
	<u>861</u>	<u>100.0 %</u>	



IOWA PHARMACISTS

Part-Time by Age and Gender

2022

<u>Age</u>	<u>Total</u>		<u>Total</u>		<u>All PT</u>	
	<u>PT Male</u>	<u>%</u>	<u>PT Female</u>	<u>%</u>	<u>Total</u>	<u>Total %</u>
<30	5	1.2	11	2.7	16	3.9
30-39	8	2.0	49	12.0	57	14.0
40-49	9	2.1	112	27.3	121	29.4
50-59	16	4.0	106	25.8	122	29.8
≥60	<u>46</u>	<u>11.2</u>	<u>48</u>	<u>11.7</u>	<u>94</u>	<u>22.9</u>
	84	20.5%	326	79.5%	410	100%

IOWA PHARMACISTS

Principal Activity

2022

<u>Activity</u>	<u># of Pharmacists</u>	<u>Percent</u>
Community*	1651	54.2%
Hospital	861	28.2
State/Federal Government**	166	5.4
Consultant (Long Term Care)	123	4.0
Academic**	73	2.4
Administrative/Management	73	2.4
Home Infusion Therapy	30	1.0
Public/Community Health	24	0.8
Other (Service Ctr-Web, Dental, Research)	14	0.5
Veterinary	14	0.5
Nuclear	11	0.3
Pharmaceutical Industry	5	0.2
Student Health	3	0.1
Total	3048	100.0%

*Community Includes: Chain, Independent, Franchise, Hospital-Sponsored, Company-Sponsored, and Relief

**Includes non-Iowa-licensed pharmacists

IOWA COMMUNITY PHARMACISTS

By Activity

2022

<u>Activity</u>	<u># of Pharmacists</u>	<u>Percent</u>	<u># of Worksites</u>
Chain	1020	61.8%	373
Independent	323	19.6	137
Hospital-Sponsored	154	9.3	60
Franchise	127	7.7	51
Other (Not Hospital Sponsored)	15	0.9	4
Company Sponsored	10	0.6	5
Relief	<u>2</u>	<u>0.1</u>	<u>2</u>
Total	1651	100.0%	632

IOWA PHARMACISTS

Iowa Birth and UI Education

2022

	2000		2022	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
All Iowa Pharmacists	2453	100.0%	3048	100.0%
Iowa Birthstate	1708	69.6%	1931	63.4%
UI Pharmacy Graduate	1101	44.9%	1402	46.0%
IA Birth and UI Graduate	918	37.4%	1122	36.8%

IOWA PHARMACISTS with UI Education or Graduate Training 2022

	<u>% of Total</u>	<u>Cumulative %</u>	<u>Number</u>	<u>% of Total</u>
•Pharmacists' w/ UI Educational Experience				
—Pharmacy School (only)	1306	43.0%		
—Pharmacy School/Residency	96	3.1%		
—Residency (only)	48	1.6%		
Subtotals	1450	47.7%		
•No UI Educational Experience				
			1598	52.3%
Totals			3048	100.00%

IOWA PHARMACISTS

Iowa Birth and Drake Education 2022

	2000		2022	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
All Iowa Pharmacists	2453	100.0%	3048	100.0%
Iowa Birthstate	1708	69.6%	1931	63.4%
Drake Pharmacy Graduate	705	28.7%	836	27.4%
IA Birth and Drake Graduate	511	20.8%	542	17.9%

IOWA PHARMACISTS with Drake Education or Graduate Training 2022

	<u>% of Total</u>	<u>Cumulative %</u>	<u>Number</u>	<u>% of Total</u>
•Pharmacists' w/ Drake Ed. Exp.			836	27.4%
—Pharmacy School (only)	836	27.4%		27.4%
Subtotals	836	27.4%		
•No Drake Ed. Exp.			<u>2212</u>	<u>72.6%</u>
		Totals	3048	100.0%

DISTRIBUTION OF PHARMACISTS By City Population Ranges 2022

<u>Population</u>	<u>Cities in Iowa</u>	<u># of Cities with Pharmacists</u>	<u># of Pharmacists</u>	<u>Percent</u>	<u>Cumulative Percent</u>
< 5,000	943 <small>(62CDP)</small>	129	402	13.2%	13.2%
5,000-14,999	54	52	527	17.3%	30.5%
15,000-49,999	20	20	489	16.0%	46.5%
50,000-99,999	8	8	968	31.8%	78.3%
≥ 100,000	<u>3</u>	<u>3</u>	<u>662</u>	<u>21.7%</u>	100%
Totals	1028	212	3048	100%	

70% of Iowa's Pharmacists are in the 31 cities with ≥ 15,000 residents.

IOWA COMMUNITY PHARMACISTS

Distribution by Community Size

2022

<u>Community Population</u>	<u># of Cities with Pharmacists</u>	<u>Number of RPh</u>	<u>Percent</u>	<u>Cumulative Percent</u>
≤ 5,000	124	296	17.9%	17.9%
5,000 – 14,999	51	393	23.8	41.7
15,000 – 49,999	20	310	18.8	60.5
50,000 – 99,999	8	368	22.3	82.8
≥ 100,000	<u>3</u>	<u>284</u>	<u>17.2</u>	100.0%
Total	205	1651	100.0%	

IOWA INDEPENDENT PHARMACISTS

Distribution by Community Size

2022

<u>Community Population</u>	<u># of Cities with Pharmacists</u>	<u># of RPh</u>	<u>Percent</u>	<u>Cumulative Percent</u>
< 5,000	68	134	41.6%	42.5%
5,000 – 14,999	30	98	30.4	72.0
15,000 – 49,999	7	22	6.8	78.8
50,000 – 99,999	6	46	14.3	93.1
≥ 100,000	3	23	7.1	100.0%
Total	114	323	100.0%	

72% of independent pharmacists work in communities of <15,000

IOWA HOSPITAL PHARMACISTS

Distribution by Community Size

2022

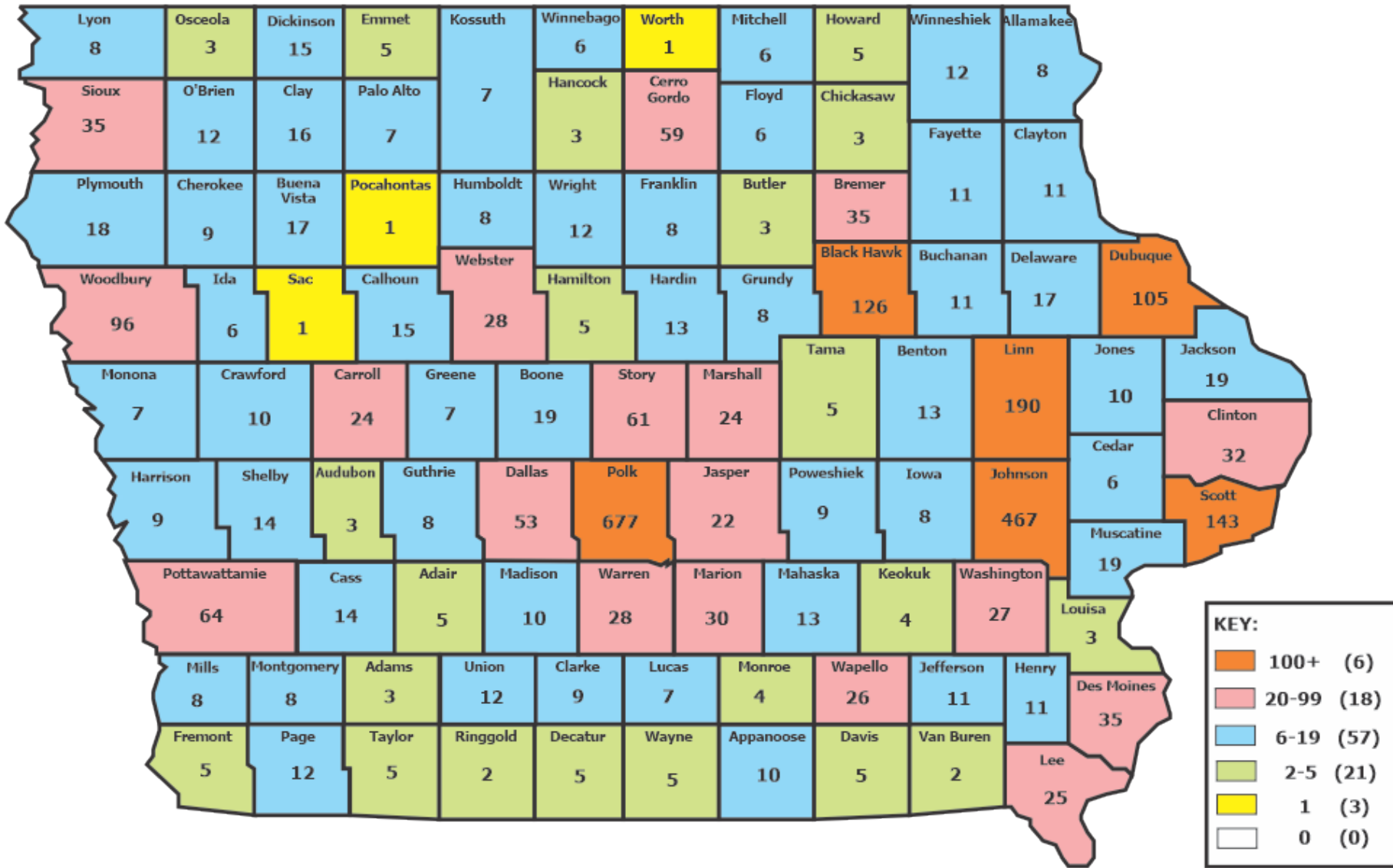
<u>Community Population</u>	<u># of Cities with Pharmacists</u>	<u># of RPh</u>	<u>Percent</u>	<u>Cumulative Percent</u>
< 5,000	42	77	8.9%	8.5%
5,000 – 14,999	39	106	12.3	21.2
15,000 – 49,999	11	63	7.3	28.5
50,000 – 99,999	7	385	44.7	73.2
≥ 100,000	3	230	26.7	100.0%
Total	102	861	100.0 %	

Geographic Distributions

IOWA PHARMACISTS

All Activities (3,048)

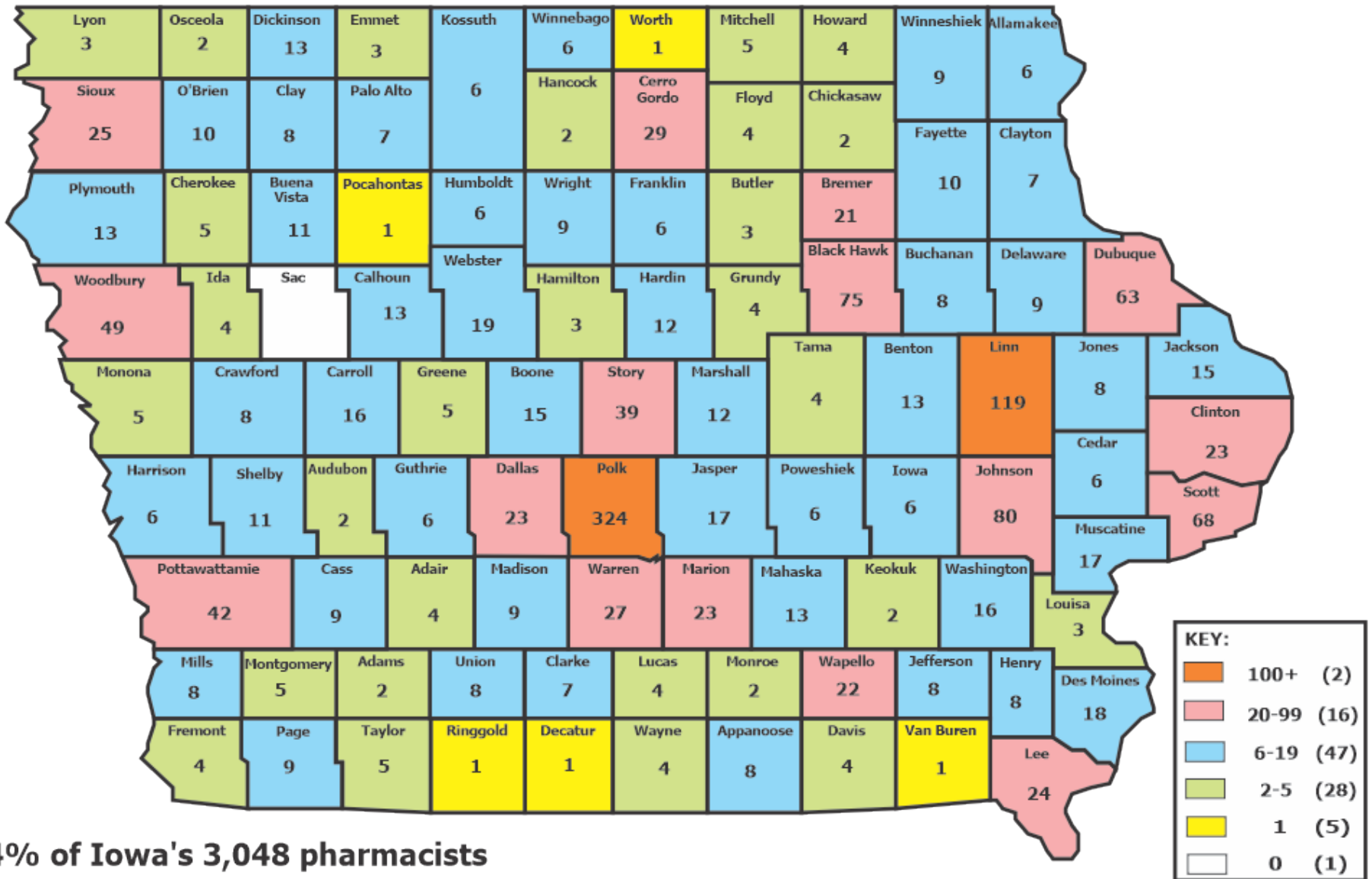
2022



IOWA PHARMACISTS

Community Pharmacists (1,651*)

2022

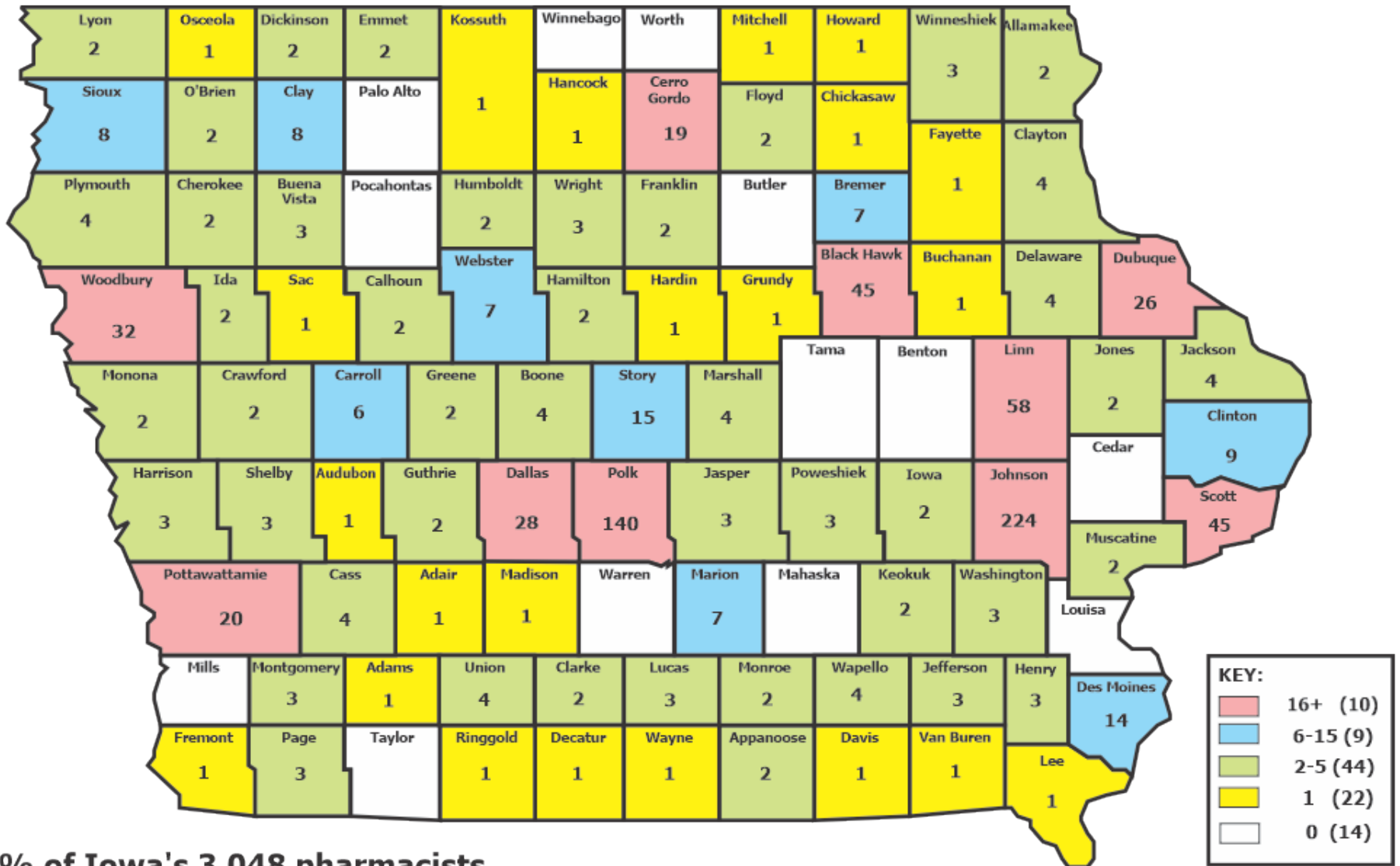


*54% of Iowa's 3,048 pharmacists

IOWA PHARMACISTS

Hospital Pharmacists (861*)

2022

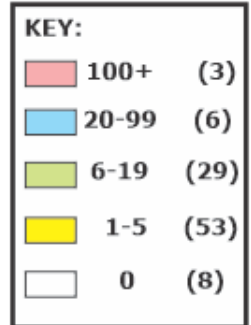
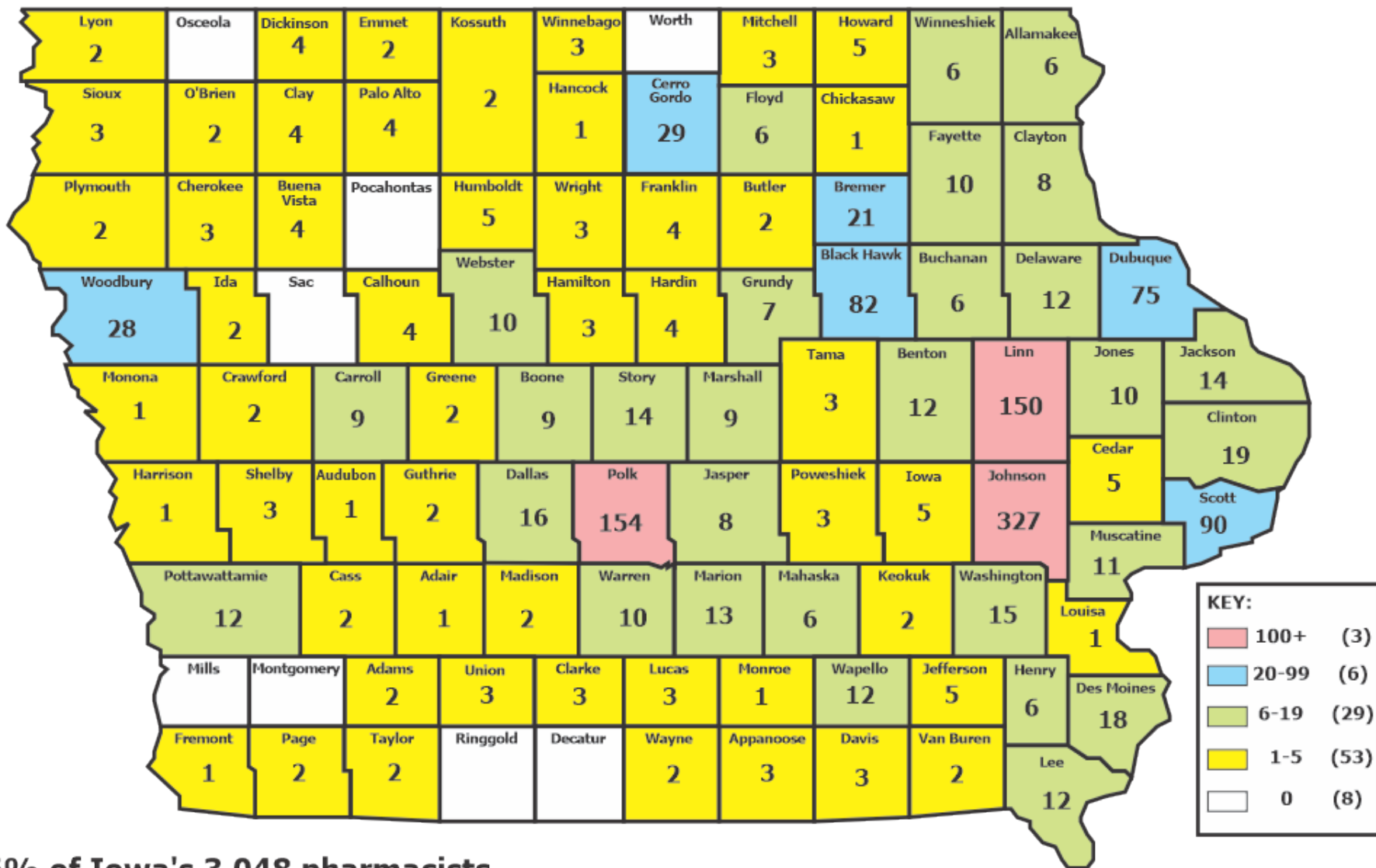


*28% of Iowa's 3,048 pharmacists

UI PHARMACY GRADUATES (1,402*)

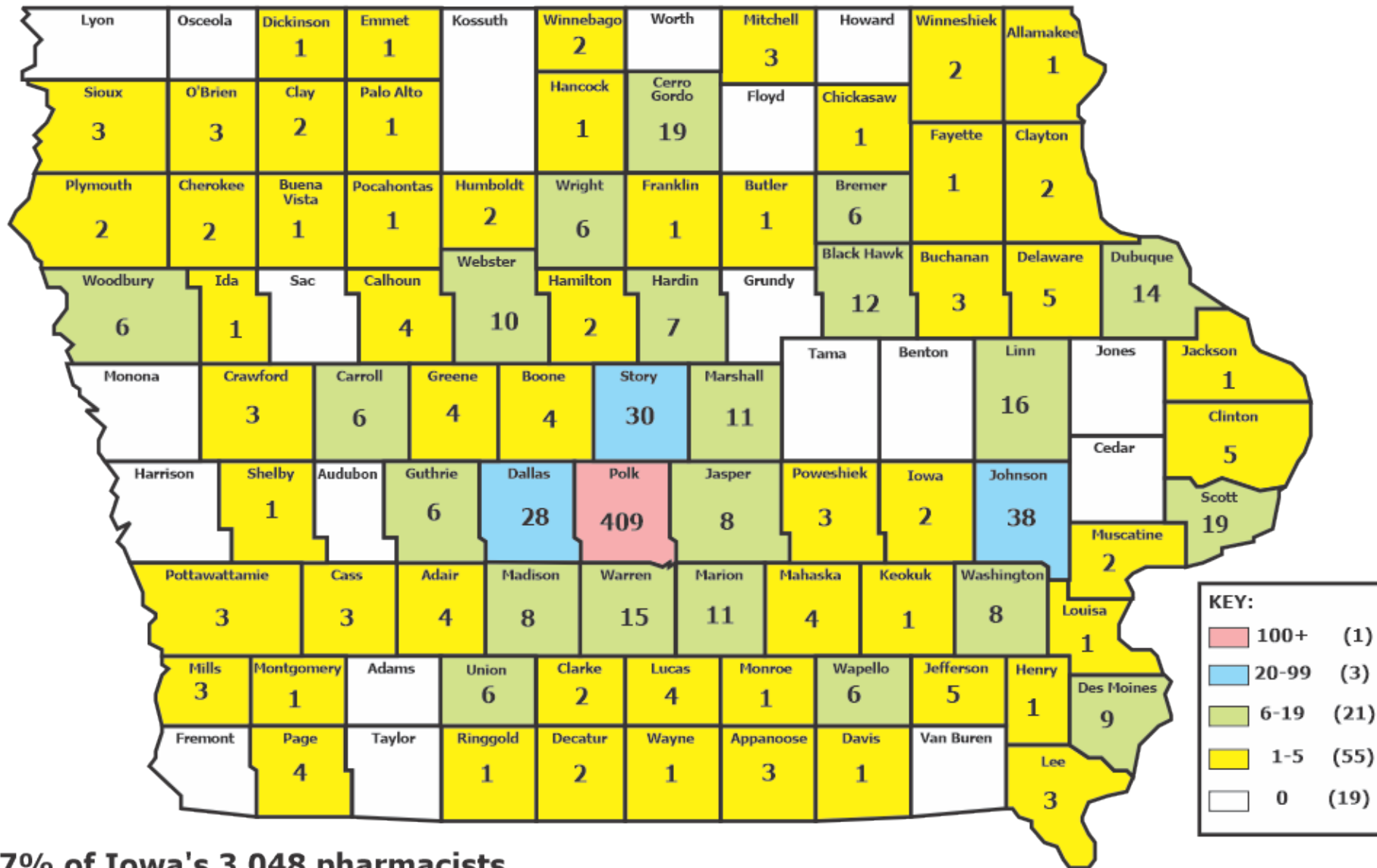
All Professional Activities

2022



***46% of Iowa's 3,048 pharmacists**

DRAKE PHARMACY GRADUATES (836)* All Professional Activities 2022

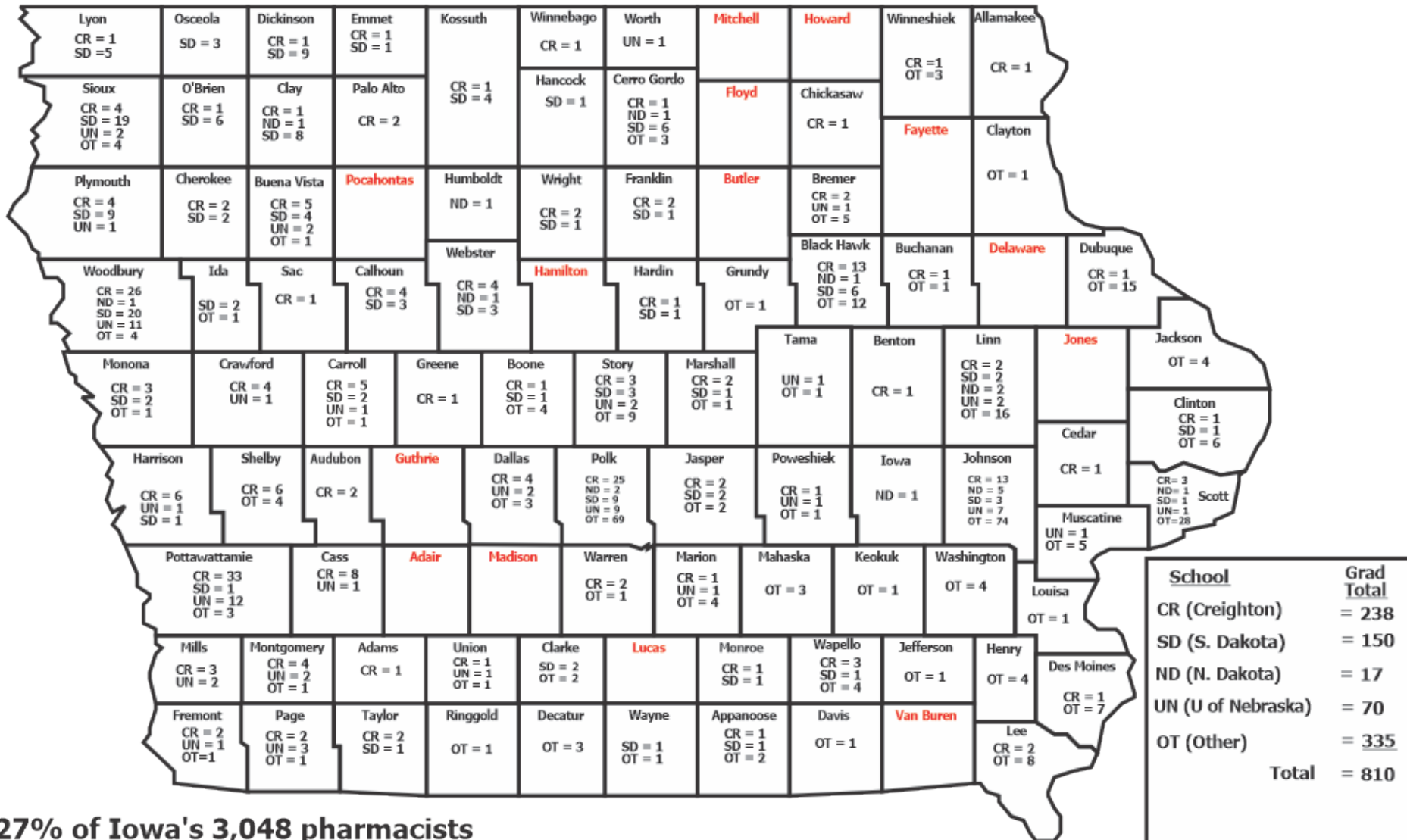


KEY:

100+	(1)
20-99	(3)
6-19	(21)
1-5	(55)
0	(19)

***27% of Iowa's 3,048 pharmacists**

DISTRIBUTION OF PHARMACY GRADUATES FROM COLLEGES OTHER THAN UI AND DRAKE* 2022

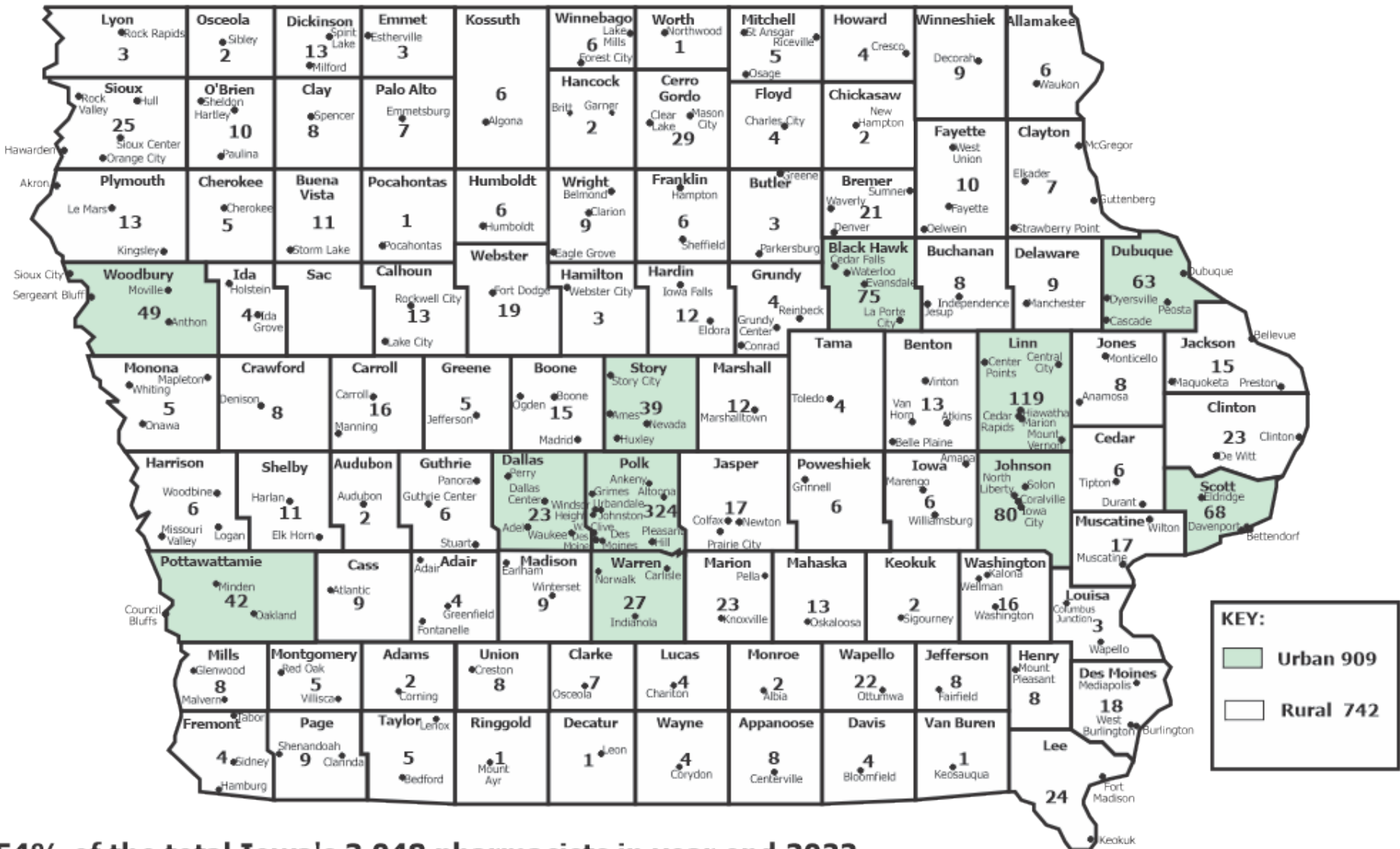


27% of Iowa's 3,048 pharmacists

IOWA PHARMACISTS

Community Pharmacist (1,651)**

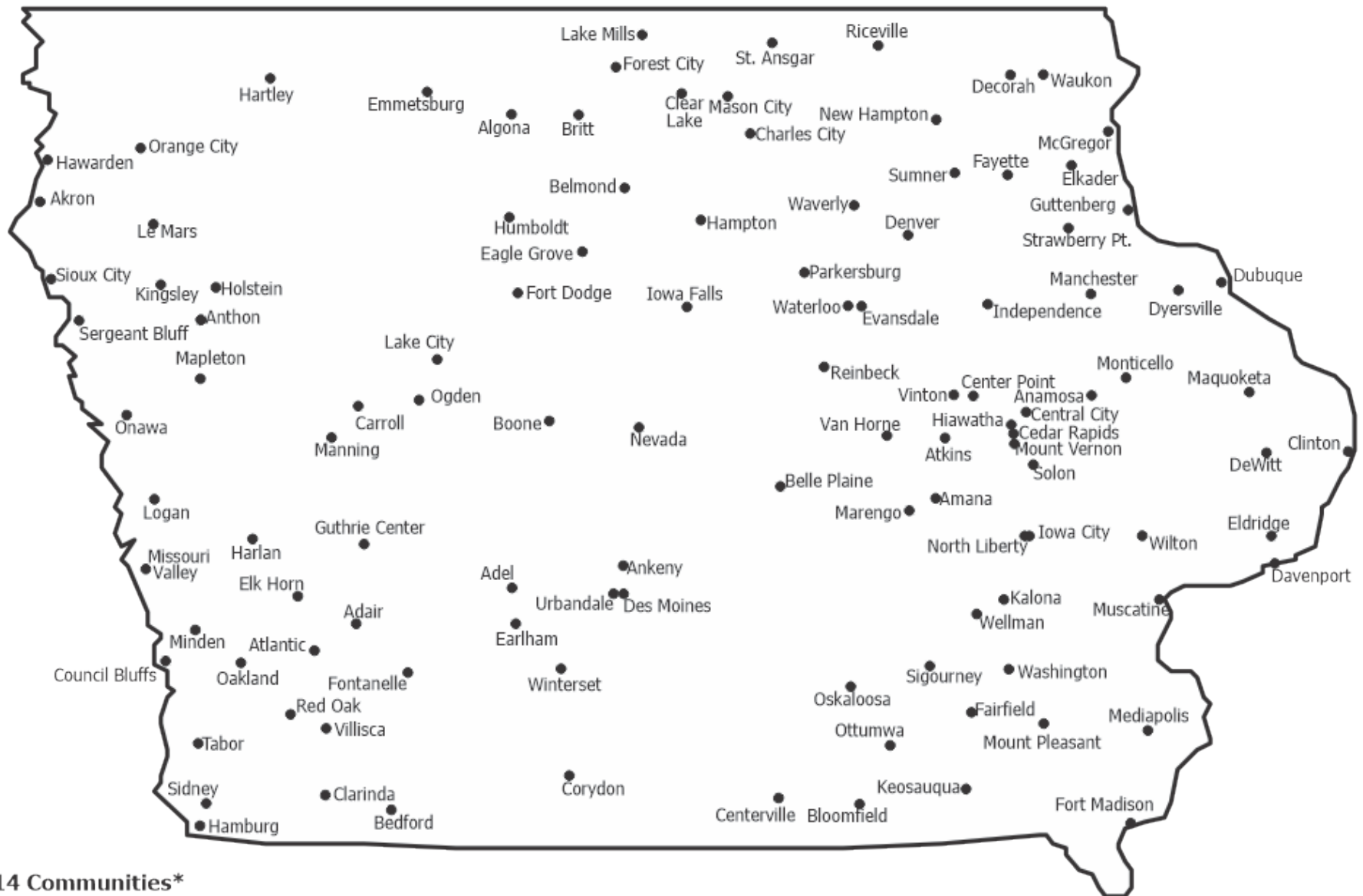
2022



*54% of the total Iowa's 3,048 pharmacists in year end 2022

** 206 Communities

IOWA COMMUNITIES* WITH INDEPENDENT PHARMACISTS (323) 2022



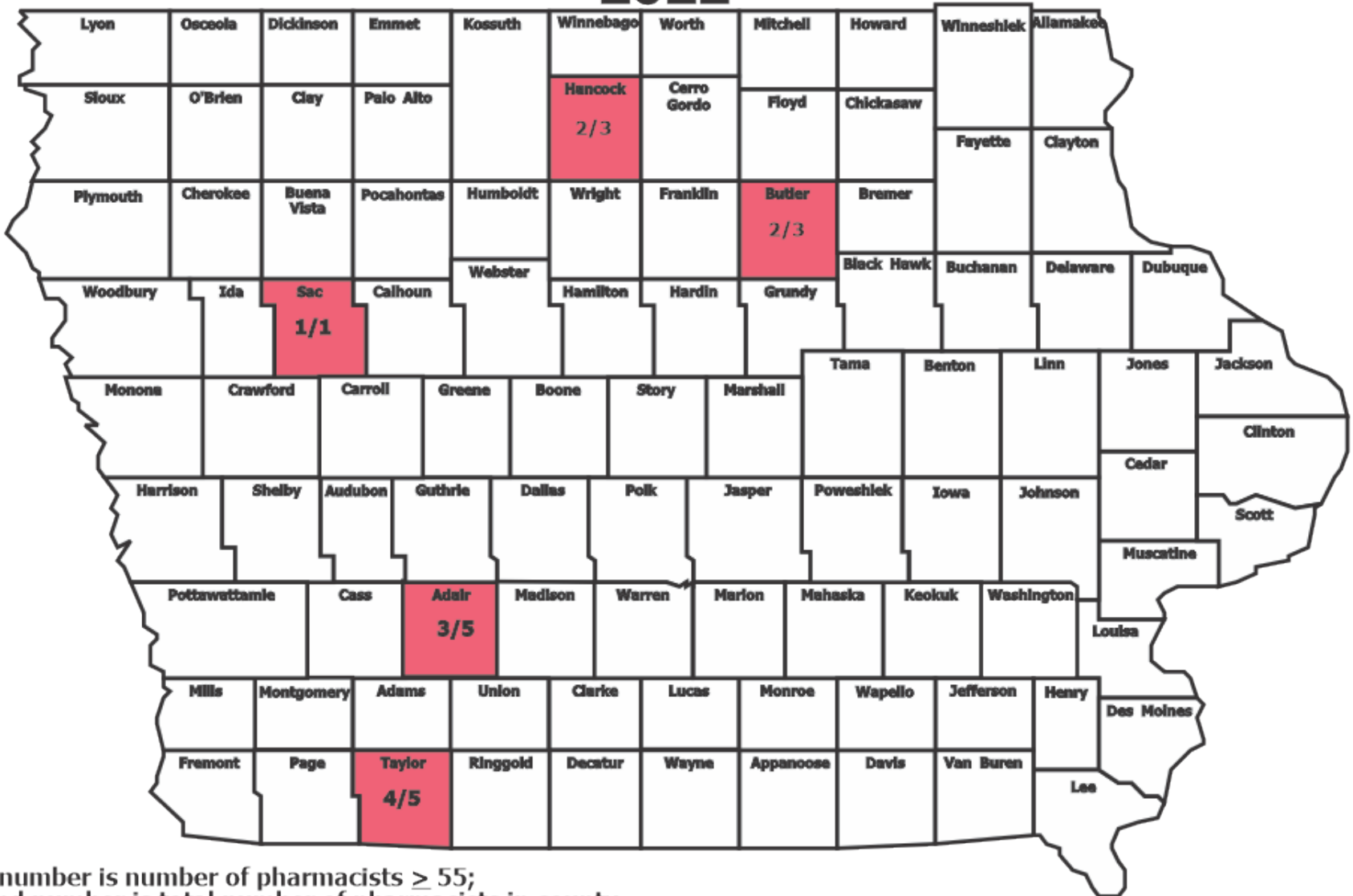
114 Communities*

IOWA COUNTIES

WITH 50% OF PHARMACISTS ≥ AGE 55

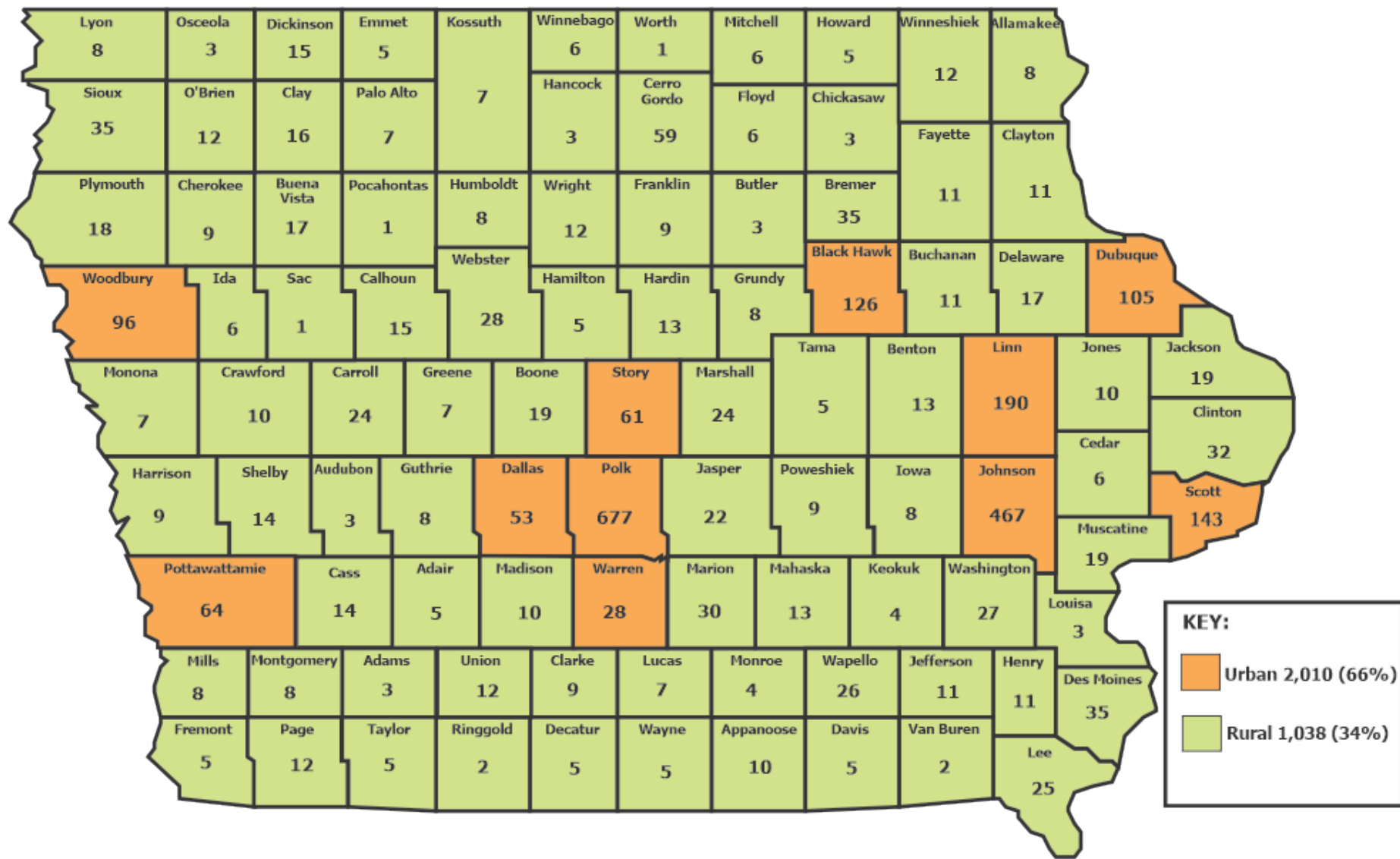
All Professional Activities

2022



First number is number of pharmacists ≥ 55;
 Second number is total number of pharmacists in county.

DISTRIBUTION OF ALL PHARMACIST (3,048) By Rural vs. Urban 2022

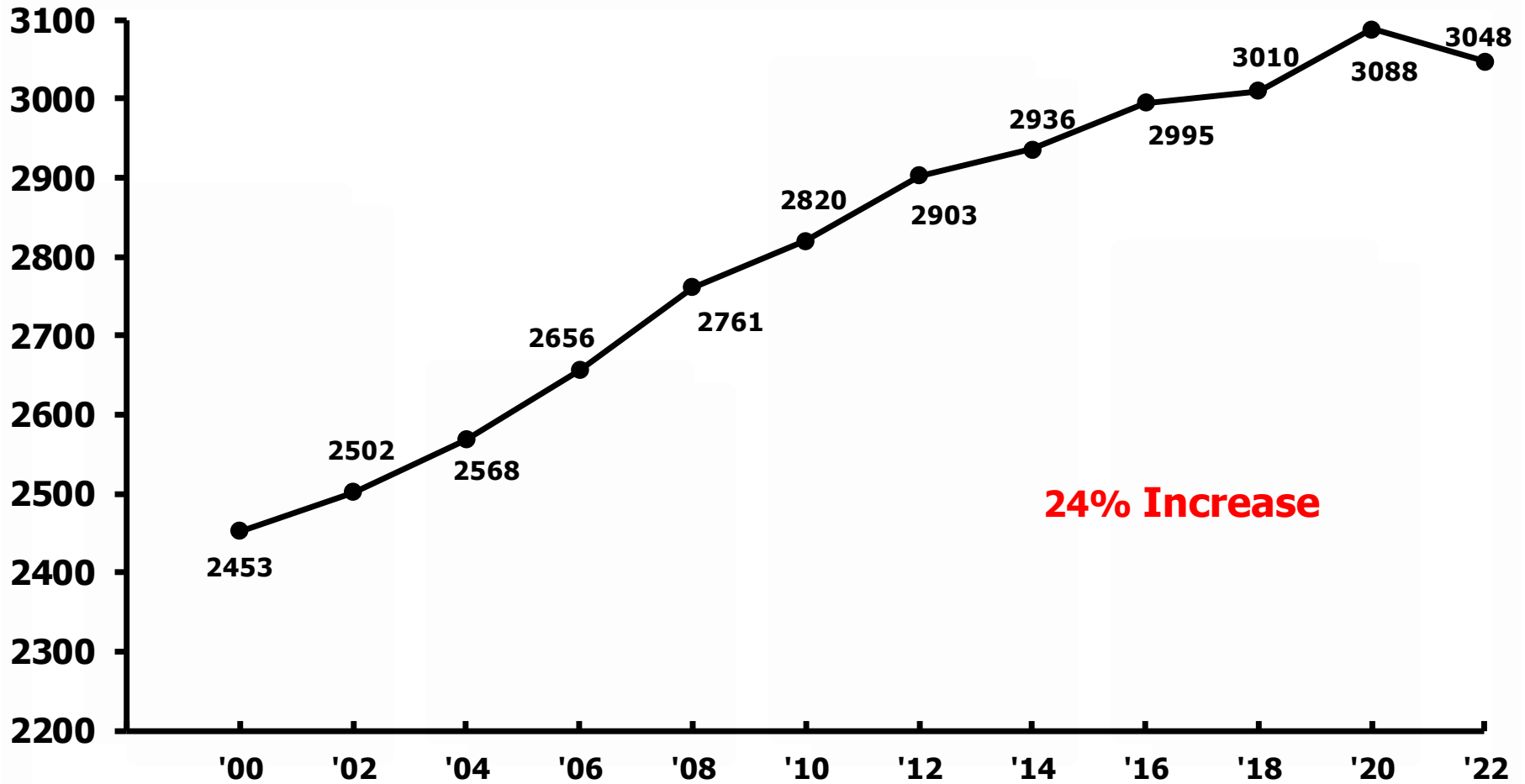


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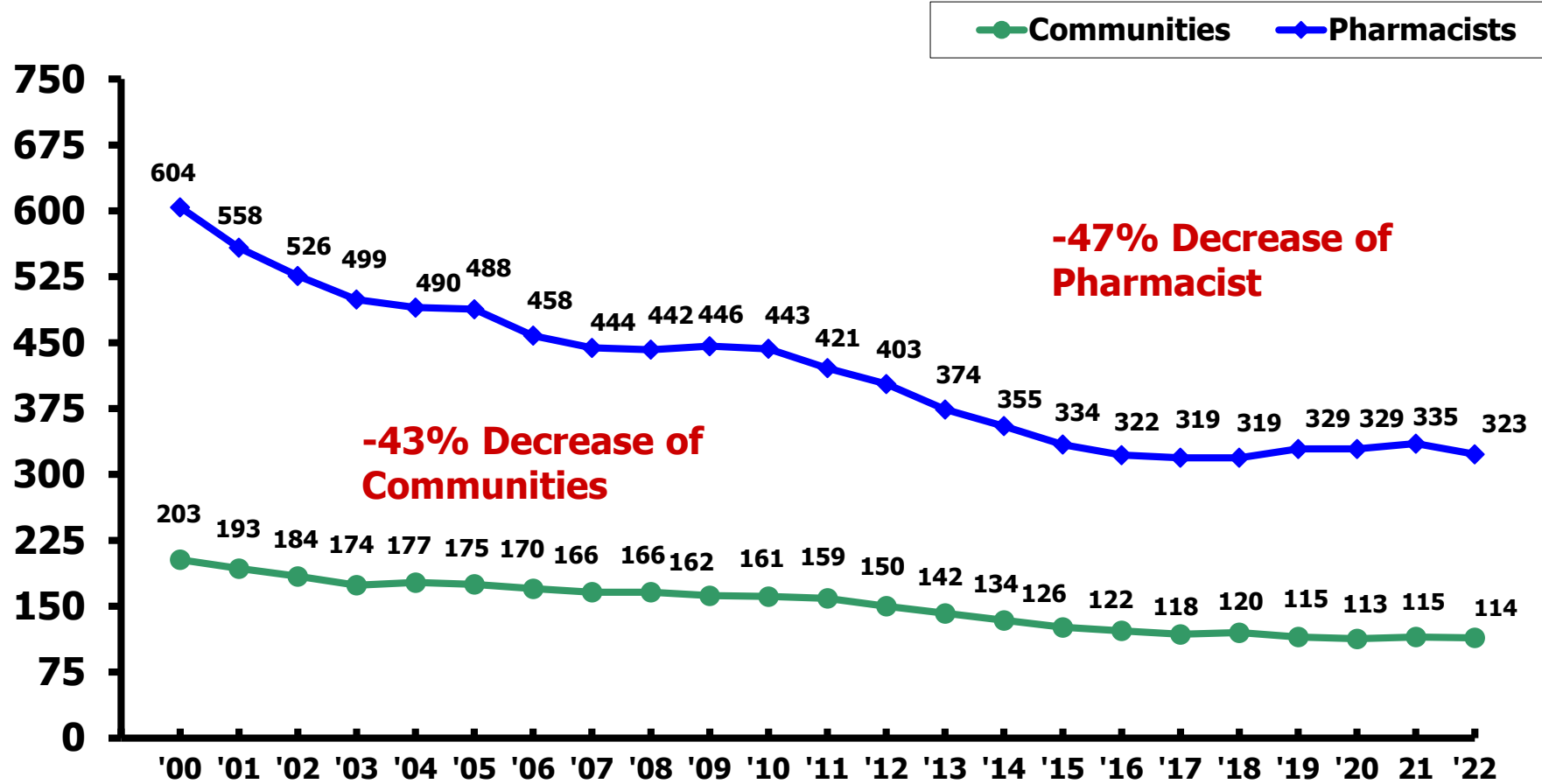
- Urban 2,010 (66%)
- Rural 1,038 (34%)

Trends

IOWA PHARMACISTS 2000 - 2022



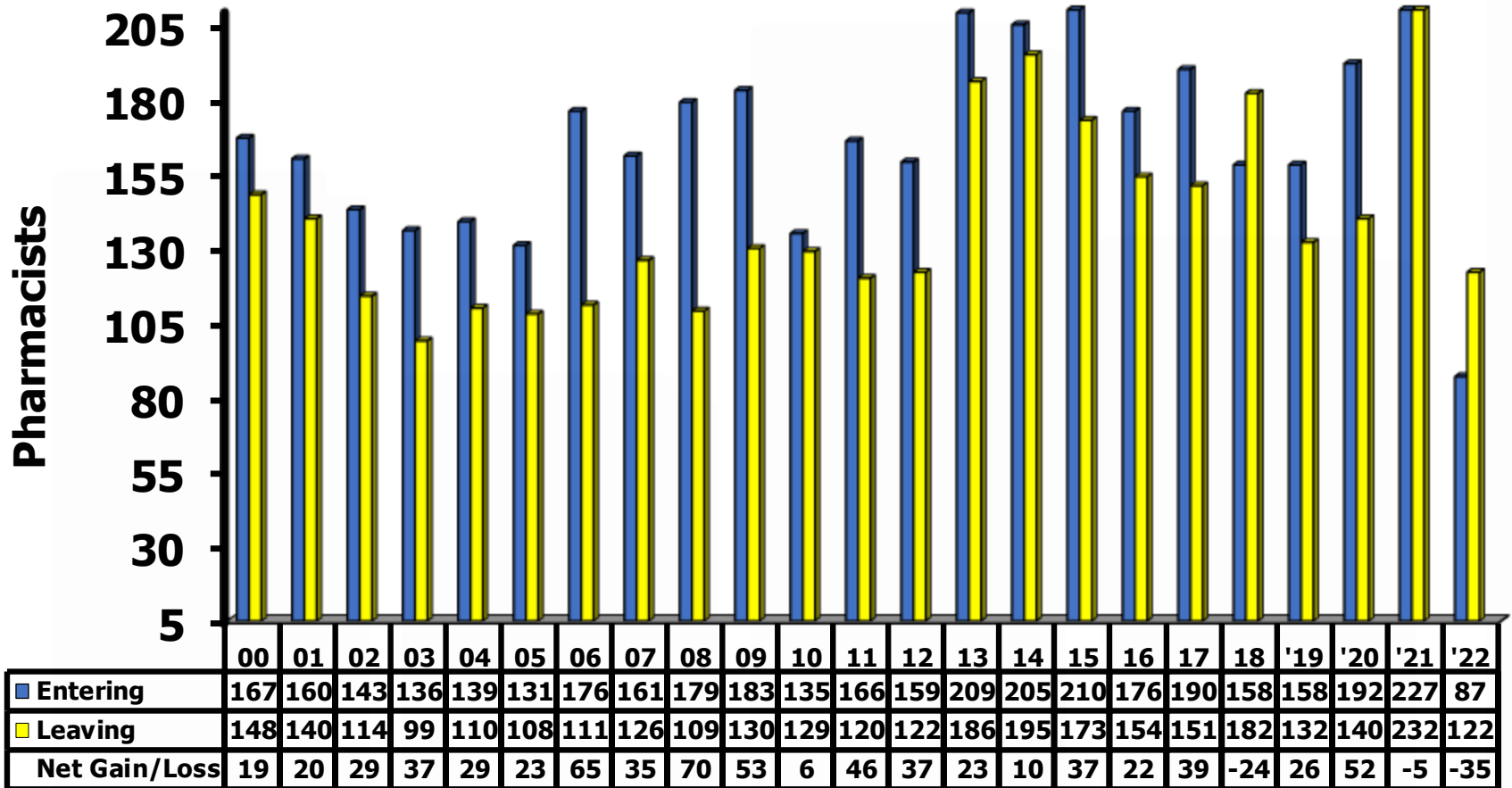
IOWA COMMUNITIES WITH INDEPENDENT PHARMACISTS 2000 - 2022



IOWA PHARMACISTS

Net Gain/Loss

2000 - 2022

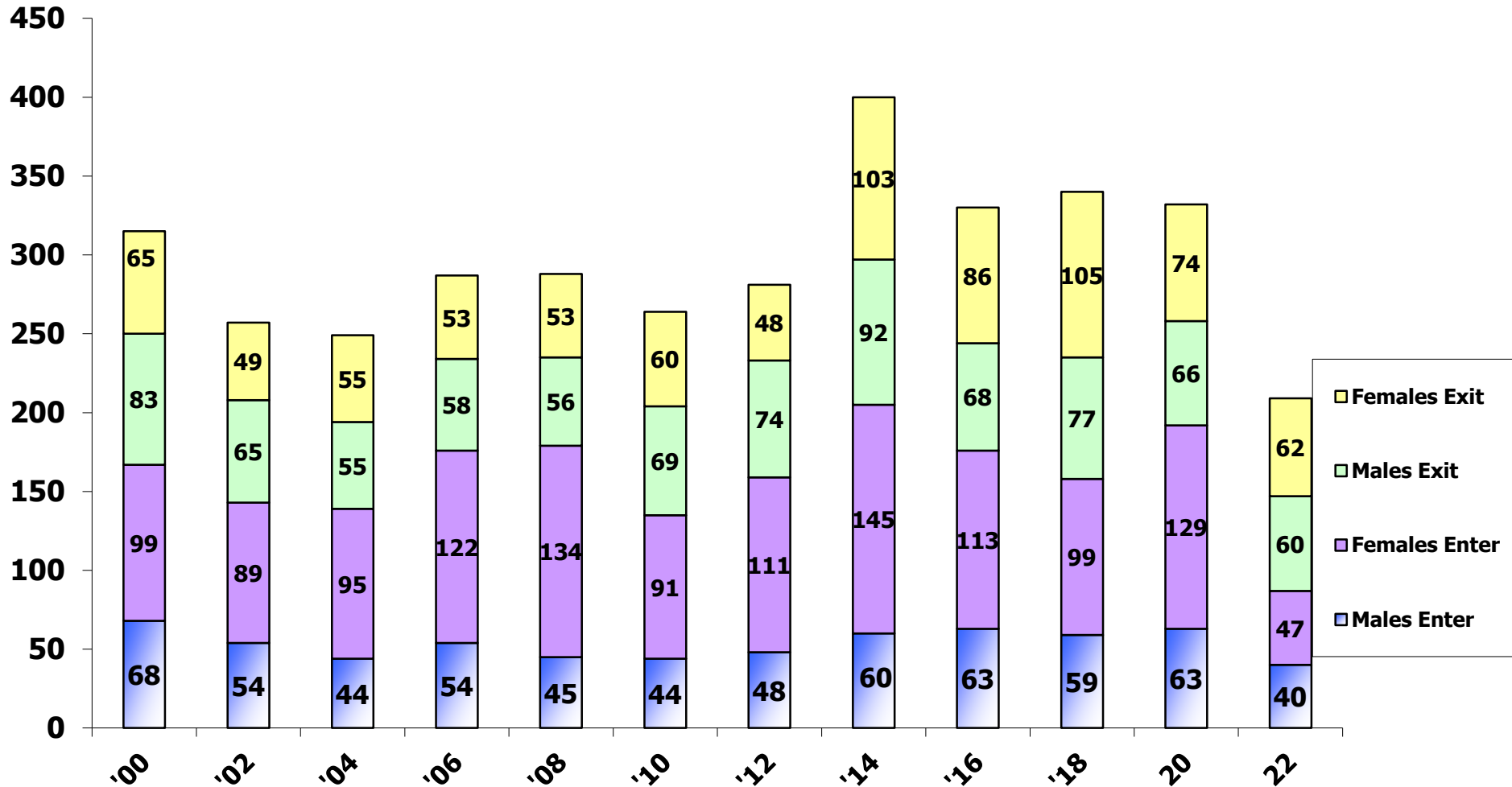


Average Net Gain/Loss = 27/year
 5-Year Average Net Gain/Loss = 3/yr

ALL IOWA PHARMACISTS

Entry/Exit by Gender

2000-2022



Source: Iowa Health Professions Tracking Center, Office of Statewide Clinical Education Programs
 UI Carver College of Medicine, June 2023

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IOWA PHARMACISTS BY ACTIVITY

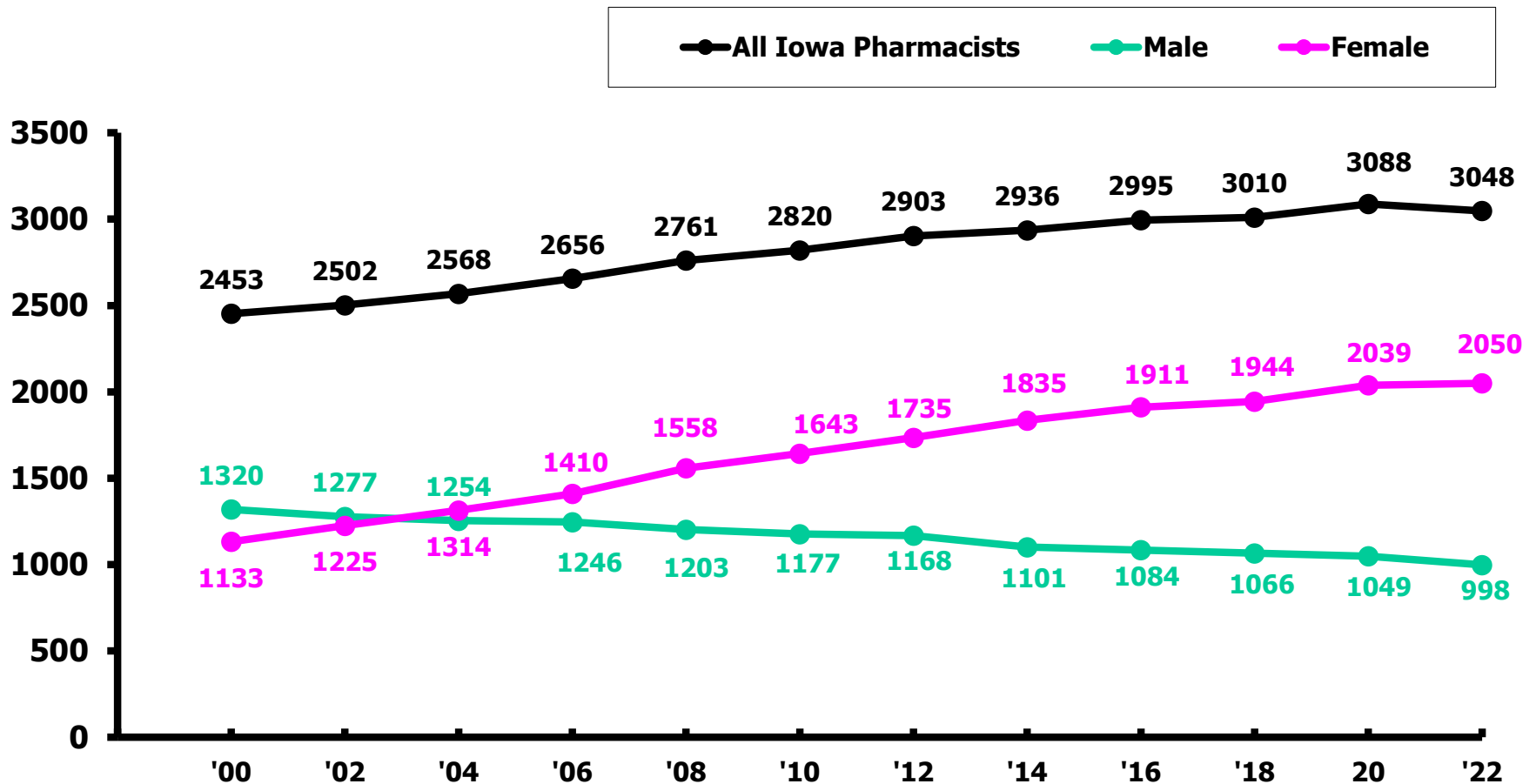
Net Increase/Decrease 2000 vs. 2022

	<u>2000</u>	<u>2022</u>	<u>Change (%)</u>
• All Active Pharmacists	2453	3048	+595 (+24%)
• Community Pharmacists	1657	1651	- 6 (-0.3%)
• Hospital Pharmacists	483	861	+378 (+78%)
• All Other Pharmacists	313	536	+223 (+71%)

IOWA PHARMACISTS

Gender

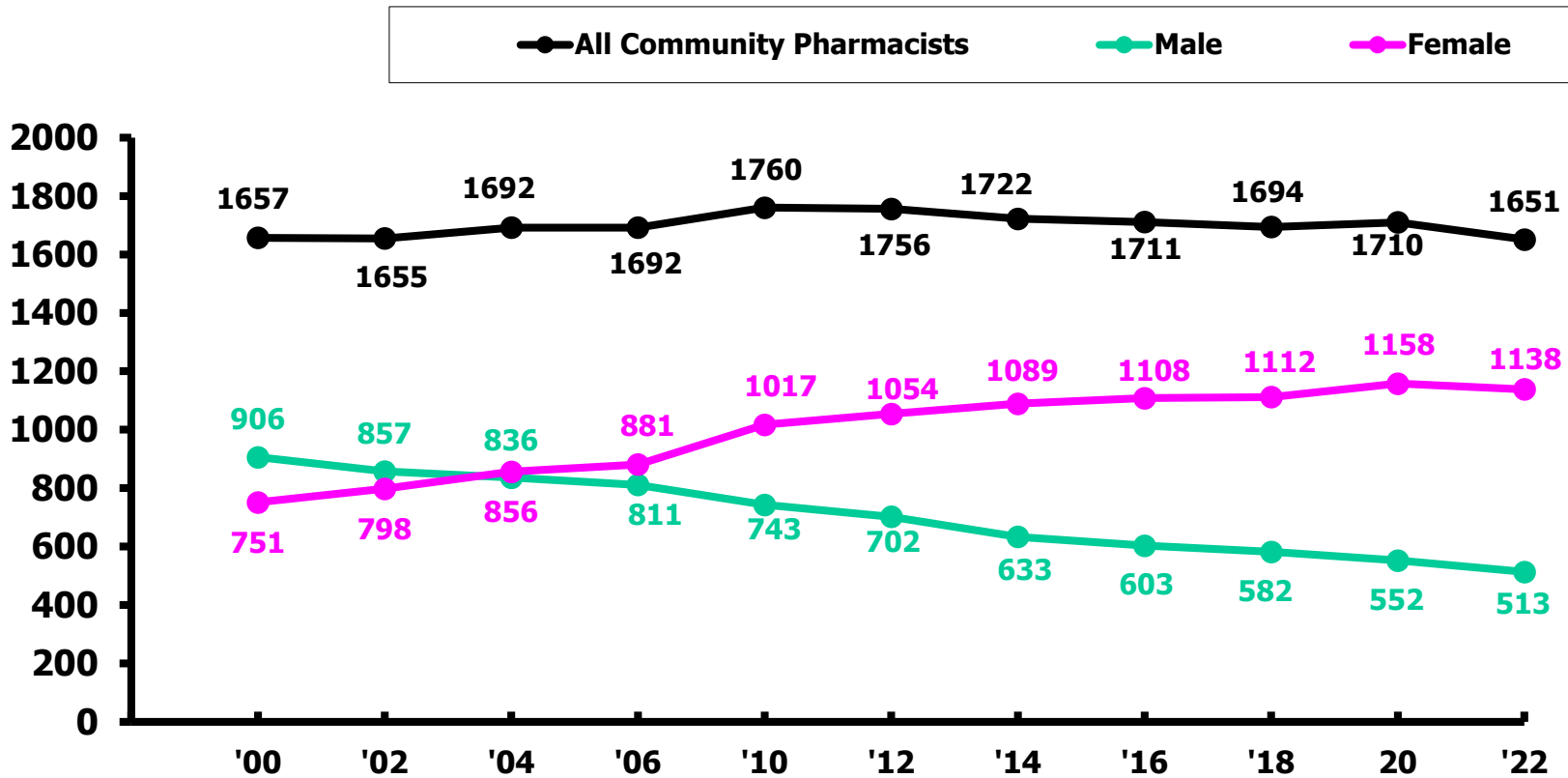
2000 - 2022



IOWA COMMUNITY PHARMACISTS

Gender

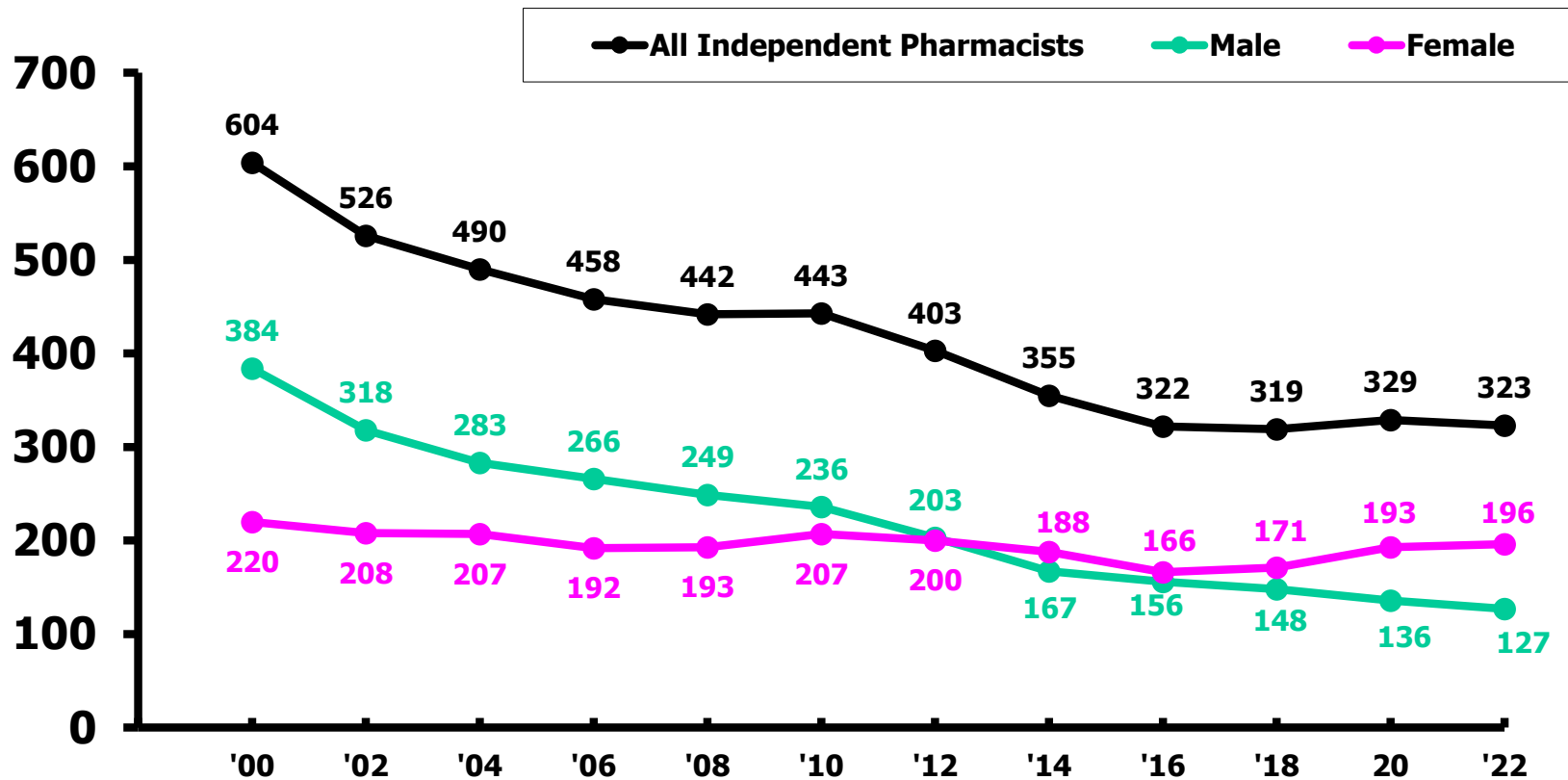
2000 - 2022



IOWA INDEPENDENT PHARMACISTS

Gender

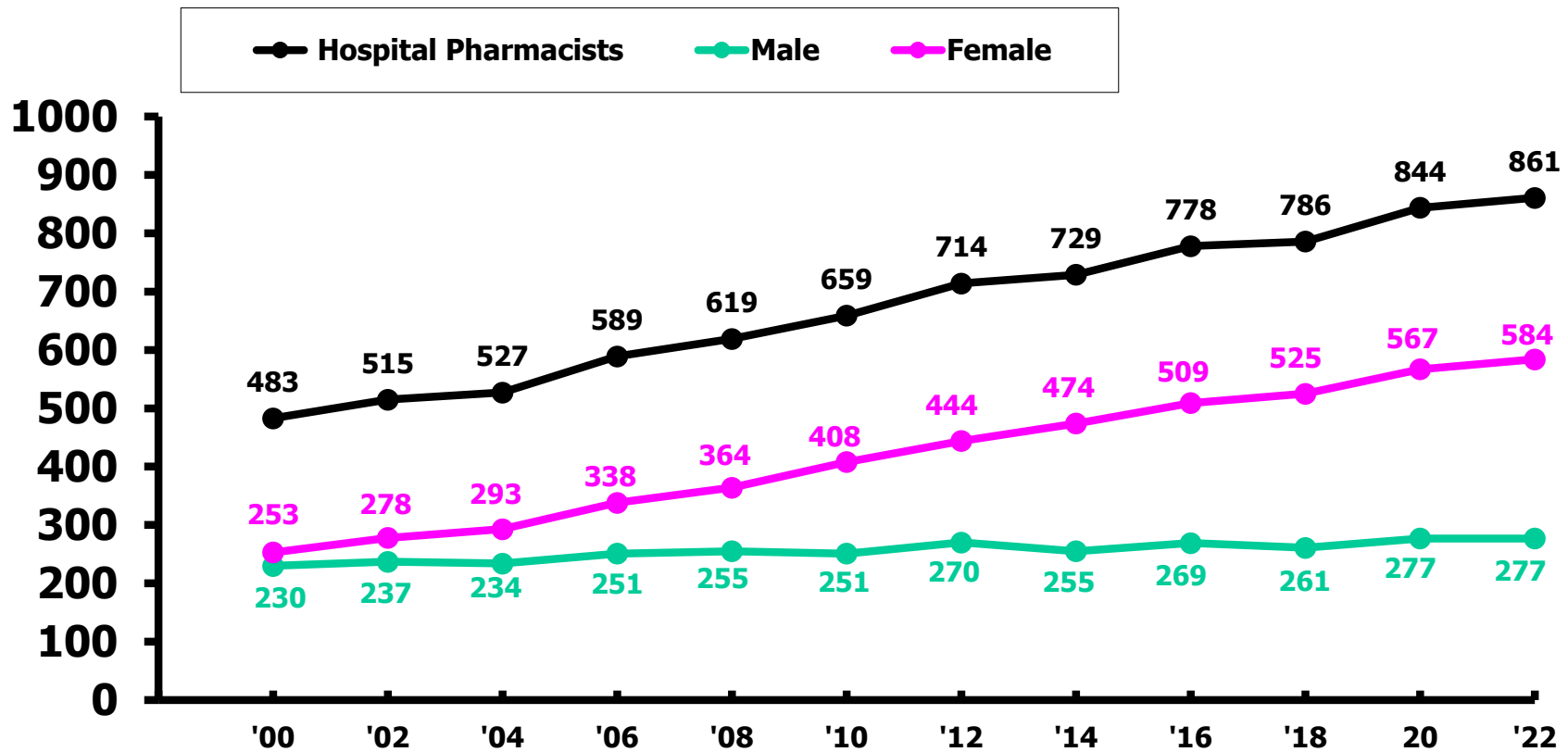
2000 - 2022



IOWA HOSPITAL PHARMACISTS

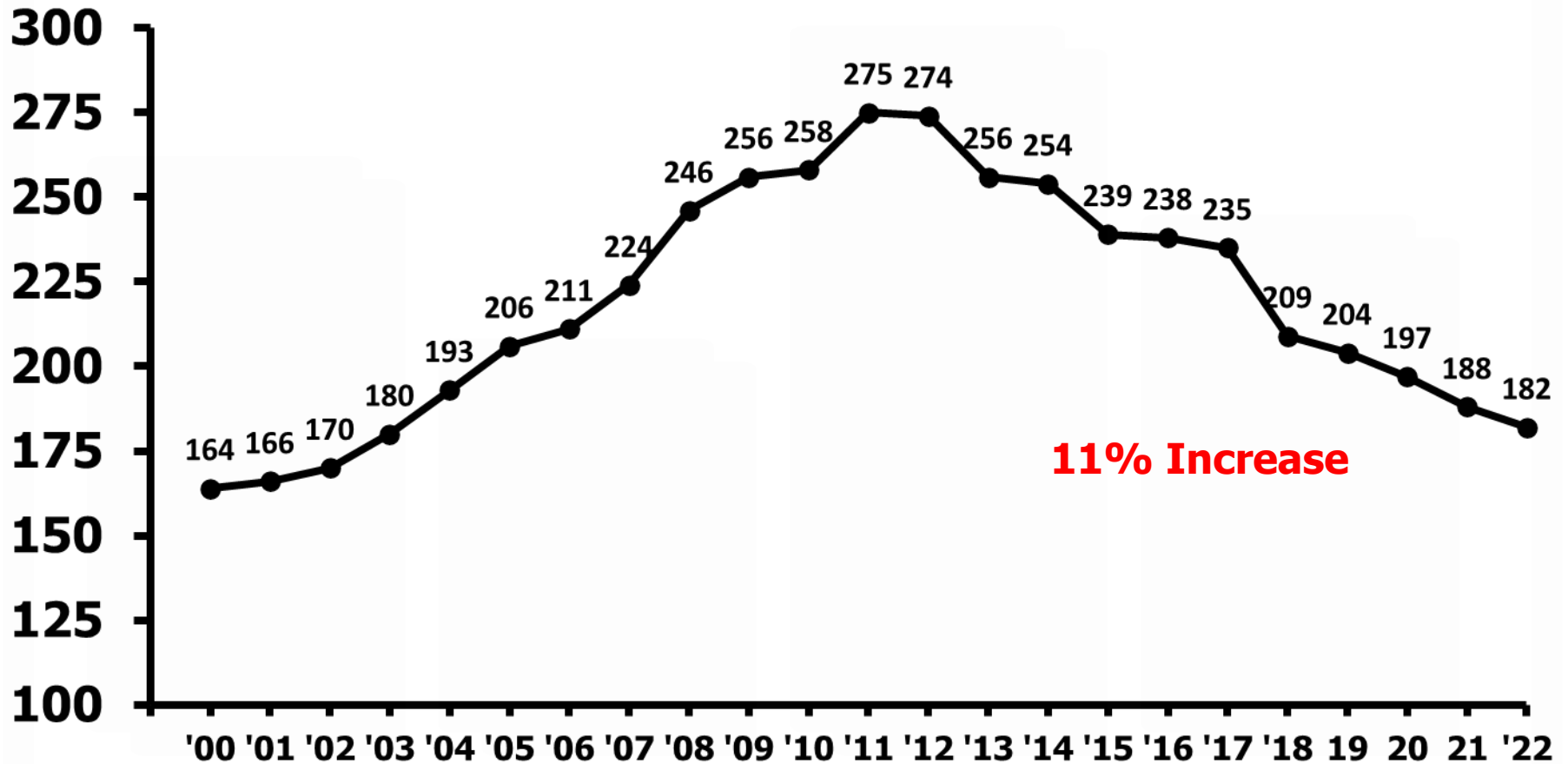
Gender

2000 - 2022



IOWA PHARMACISTS

Age \geq 55 with Population \leq 10,000 2000 - 2022



IOWA PHARMACISTS

Attrition Analysis

2000-2022

Year	Retirement	Relocation	Death	Health	Training	Inactive	Loss of License	Military	Misc.	Total
2000	21	96	4	-	6	15	1	-	5	148
2001	34	85	3	3	1	11	3	-	-	140
2002	23	70	2	1	1	16	-	1	-	114
2003	16	49	5	1	1	24	1	-	2	99
2004	26	52	7	1	-	15	1	-	8	110
2005	21	64	4	-	1	18	-	-	-	108
2006	31	64	3	3	1	9	-	-	-	111
2007	25	60	1	-	-	33	1	1	5	126
2008	23	45	3	2	-	30	2	-	4	109
2009	27	52	6	2	1	31	3	-	8	130
2010	39	53	1	-	1	19	2	-	14	129
2011	32	42	3	1	1	12	6	-	23	120
2012	43	39	3	3	-	10	6	-	18	122
2013	83	55	2	1	2	15	2	-	26	186
2014	67	68	1	1	-	25	7	-	26	195
2015	49	58	2	4	-	40	1	-	19	173
2016	50	41	2	1	1	51	2	-	6	154
2017	41	44	2	1	1	30	2	-	30	151
2018	52	38	5	1	2	17	1	-	66	182
2019	38	42	4	-	-	14	1	-	33	132
2020	44	47	1	1	1	11	1	-	34	140
2021	78	74	1	3	1	24	2	-	49	232
2022	<u>33</u>	<u>46</u>	3	1	3	<u>14</u>	-	-	<u>22</u>	122
Total	896	1284	68	31	25	484	45	2	398	3233
Annual Average	39.0	55.8	3.0	1.3	1.1	21.0	2.0	0.1	17.3	140.6

IOWA PHARMACISTS

Retirement Summary

2022

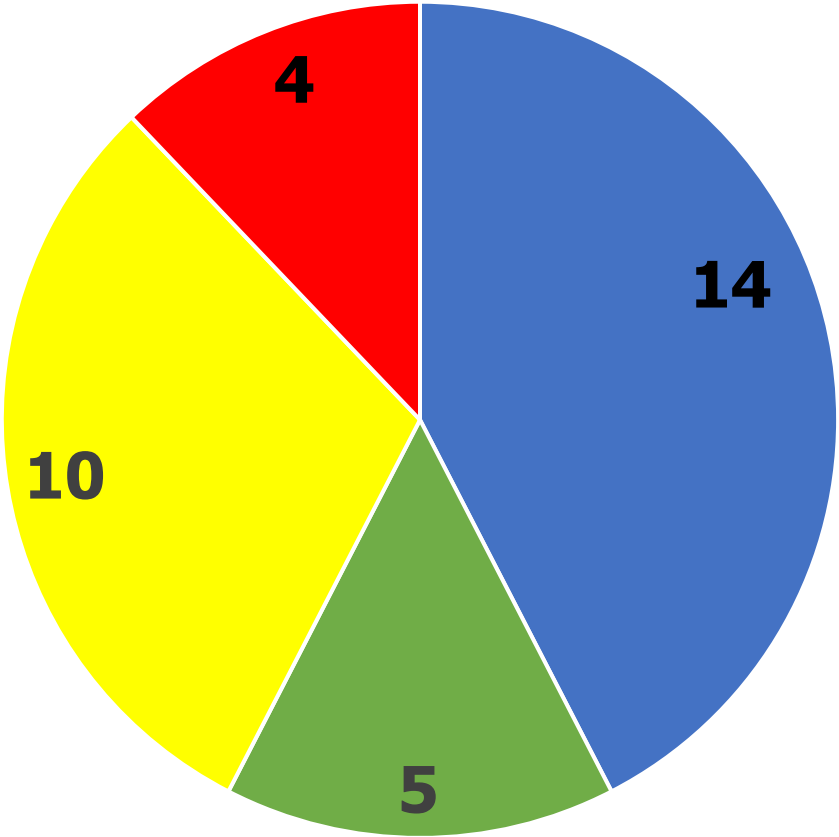
Retirements = 33

Mean Age = 67

Median Age = 67

Note: Average number of retirements over last 5 years = 49

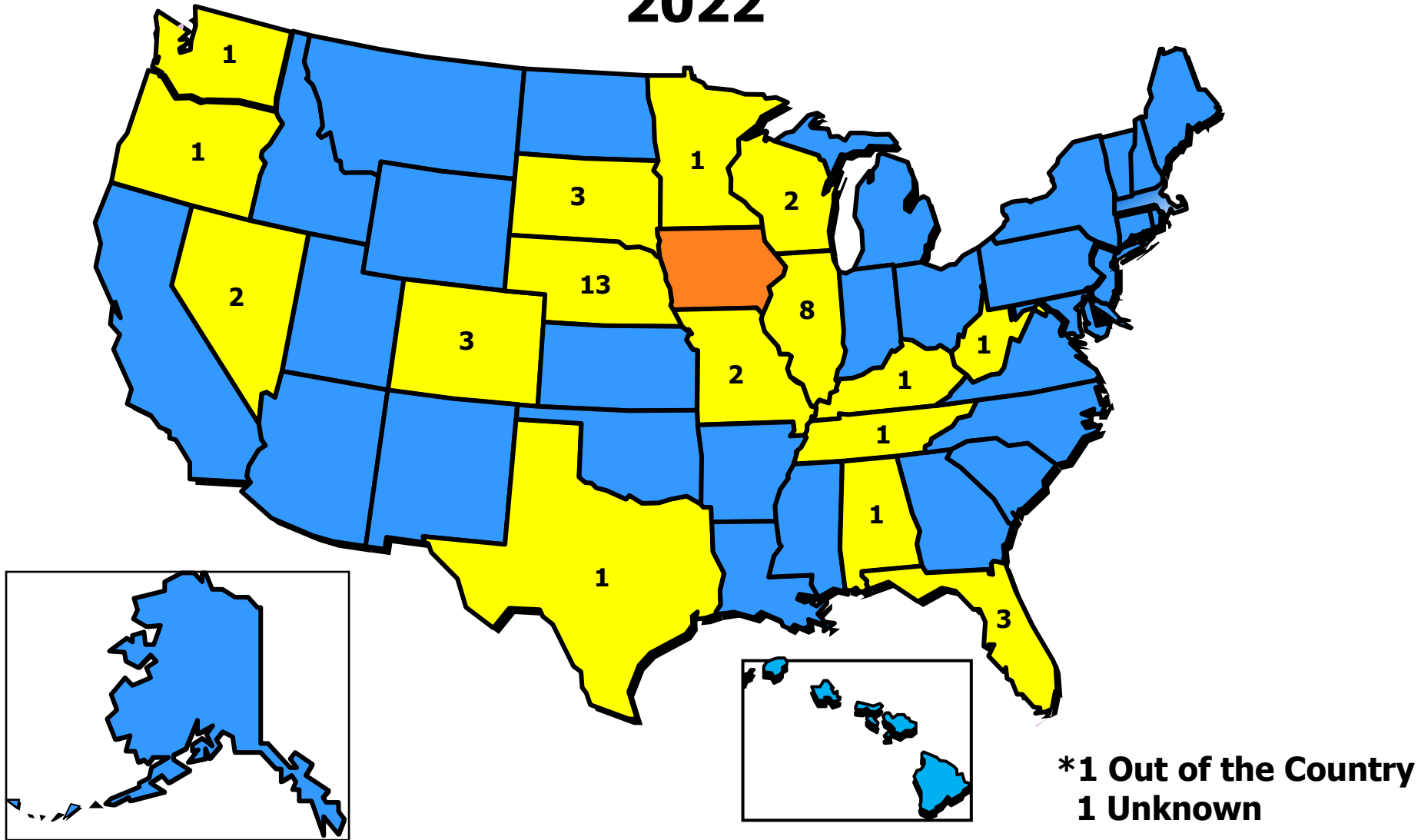
PHARMACISTS RETIRING ACTIVITIES 2022



Total = 33

■ Community ■ Hospital ■ Independent ■ Other

RELOCATION OF IOWA PHARMACISTS IN US (46) 2022



Workforce Comparisons

IOWA HEALTH PROFESSIONS INVENTORY

Composition of Workforce – 2022

Physicians **5,824**

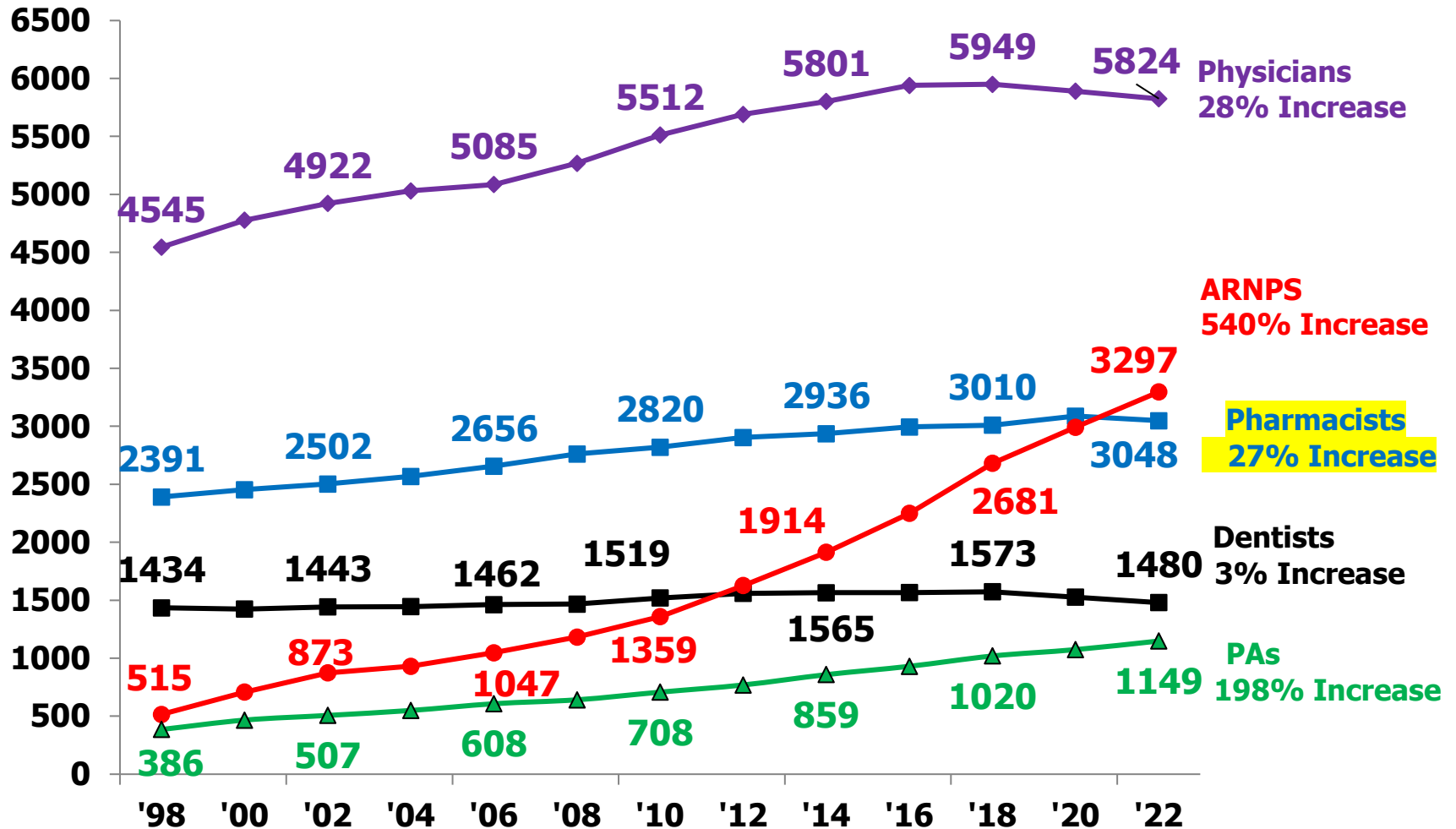
Advanced Practice Nurse **3,297**

Pharmacists **3,048**

Dentists **1,480**

Physician Assistants **1,149**

IOWA HEALTH PROFESSIONS INVENTORY 1998-2022



IOWA HEALTH PROFESSIONS INVENTORY

Composition of Workforce - 2022

Net Gain/Loss Summary

	<u>Entering</u>	<u>%</u>	<u>Leaving</u>	<u>%</u>	<u>Net</u>	<u>%</u>	<u>Total</u>
Physicians	413	7.1%	441	7.6%	-28	-0.5%	5,824
ARNPs	357	10.8%	222	6.7%	135	4.1%	3,297
Pharmacist	87	2.9%	122	4.0%	-35	-1.2%	3,048
Dentists	16	1.1%	32	2.2%	-16	-1.1%	1,480
Physician Assistants	116	10.1%	71	6.2%	45	3.9%	1,149

IOWA HEALTH PROFESSIONS INVENTORY

Composition of Workforce – 2022

Age

	<u>Physicians</u>	<u>Physician Assistants</u>	<u>Dentists</u>	<u>Pharmacists</u>	<u>ARNPs</u>
<40	1451 25%	582 51%	520 35%	1231 40%	1373 42%
40-49	1695 29%	294 26%	368 25%	836 28%	1064 32%
50-59	1421 24%	173 15%	267 18%	616 20%	552 17%
≥ 60	1257 22%	100 8%	328 22%	365 12%	308 9%
Total	5824	1149	1480	3048	3297

IOWA HEALTH PROFESSIONS INVENTORY

Composition of Workforce - 2022

Gender

	<u>Male</u>	<u>%</u>	<u>Female</u>	<u>%</u>	<u>Total</u>
Physicians	3,815	66%	2,009	34%	5,824
ARNPs	381	12%	2,916	88%	3,297
Pharmacists	998	33%	2,050	67%	3,048
Dentists	951	64%	529	36%	1,480
Physician Assistants	312	27%	837	73%	1,149

IOWA HEALTH PROFESSIONS INVENTORY

Composition of Workforce - 2022

Retirement Summary

	<u>Retired</u>	<u>Percent of All Attrition</u>	<u>Average Age Retirement</u>	<u>All Attrition</u>	<u>Average Age All Attrition</u>
Physicians	151	34%	67	441	53
Pharmacists	33	27%	67	122	49
Dentists	18	56%	61	32	58
ARNPs	31	14%	66	222	47
Physician Assistants	12	17%	64	71	43

IOWA HEALTH PROFESSIONS SUPPLY*

Rural vs. Urban

2022

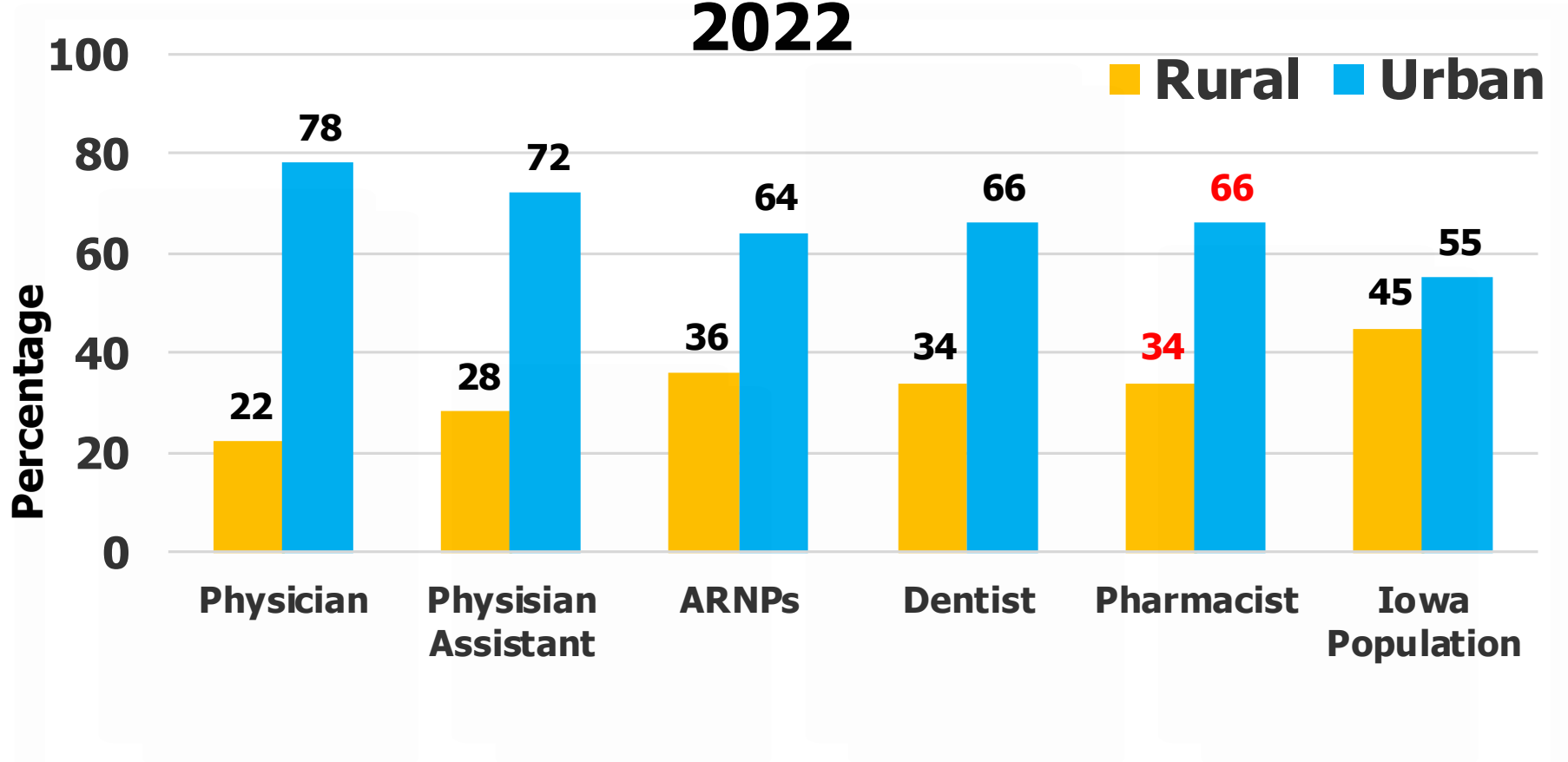
<u>Profession</u>	<u>Rural</u>	<u>%</u>	<u>Urban</u>	<u>%</u>	<u>Total</u>
• Physician	1286	22	4538	78	5824
• Physician Assistant	321	28	828	72	1149
• ARNPs	1179	36	2118	64	3297
• Dentist	506	34	974	66	1480
• Pharmacists	1038	34	2010	66	3048
• IOWA	1,450,240	45	1,750,277	55	3,200,517

* For year ending 12-31-2022, using 2022 census population estimates

IOWA HEALTH PROFESSIONS SUPPLY*

Rural vs. Urban

2022



* For year ending 12-31-2022, using 2021 census