

Iowa Pharmacist Tracking System

**Advisory Committee Meeting
February 24, 2022**

Meeting Agenda & Participant List

Iowa Pharmacist Tracking System
Advisory Committee Meeting
Thursday, February 24, 2022
11:00 A.M. – 1:00 P.M.

Iowa Health Professions Tracking Center
Office of Statewide Clinical Education Programs
UI Carver College of Medicine, February 2022

— **Agenda** —

- Welcome and Introductions
- Meeting Agenda and Participant List
- 2020 Annual Report
 - Annual Benchmarks
 - Geographic Distribution
 - Trends
 - Workforce Summary
- Open Discussion Items

Iowa Pharmacist Tracking System
Advisory Committee Meeting
Thursday February 24, 2022
11:00 A.M. – 1:00 P.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

Susan S. Vos, PharmD, FAPhA

Clinical Associate Professor
Department of Pharmacy Practice and Science
University of Iowa College of Pharmacy

Therese (Terry) Witkowski

Executive Officer
Iowa Board of Pharmacy Examiners

Iowa Pharmacist Tracking System
Advisory Committee Meeting
Thursday February 24, 2022
11:00 A.M. – 1:00 P.M.

Iowa Health Professions Tracking Center

Greg Nelson
Assistant Dean for Clinical Education Programs

Theresa Dunkin
Program Manager/Assistant Director

Nibras Elnour
Data Analyst/Assistant Manager

Linda Thiesen
Data Analyst/Assistant Manager

Francisco Olalde
Data Analyst/Assistant Manager

Annual Benchmarks

IOWA PHARMACISTS Annual Workforce Report 2020

<u>Date</u>	<u>Pharmacists</u>
• December 2020	2955
• January 2020	<u>-2974</u>
Net Gain/Loss	-19

IOWA PHARMACISTS

Entering vs. Terminating Practice

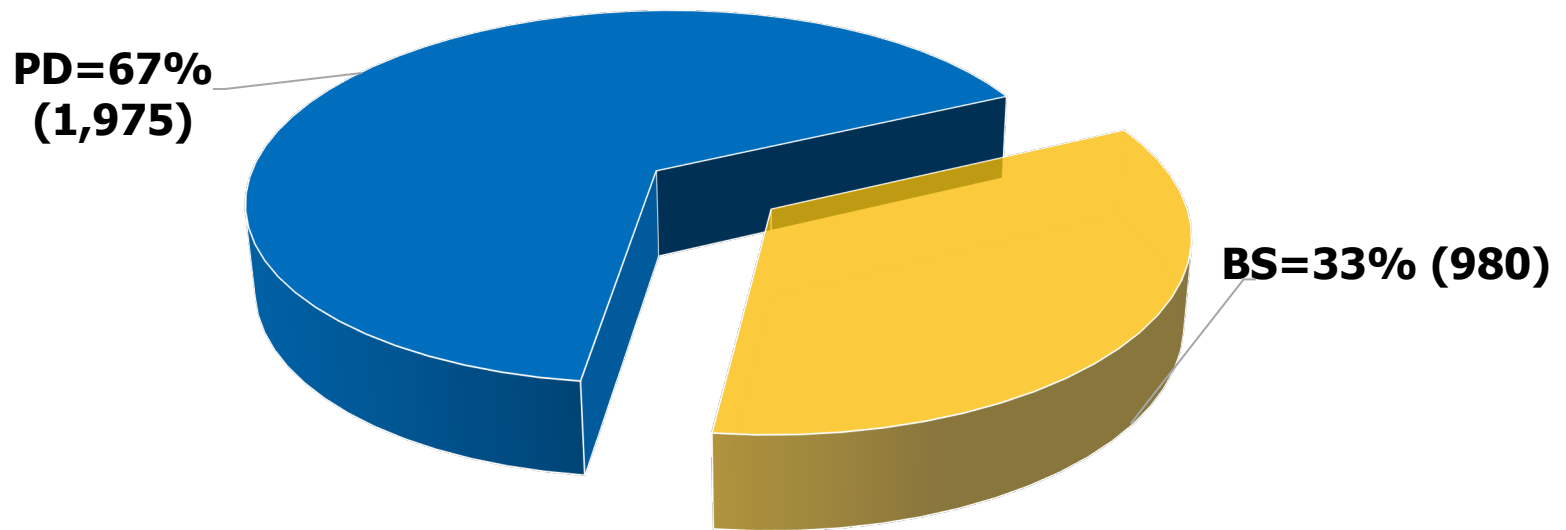
2020

	<u>2020</u>	<u>Prior Year</u>	<u>Prior Ten-Year Average</u>
Pharmacists Entering	41	93	169
Pharmacists Terminating	<u>-60</u>	<u>-118</u>	<u>-153</u>
Net Gain/Loss	-19	-25	+16

IOWA PHARMACISTS

Pharmacy Degree

2020

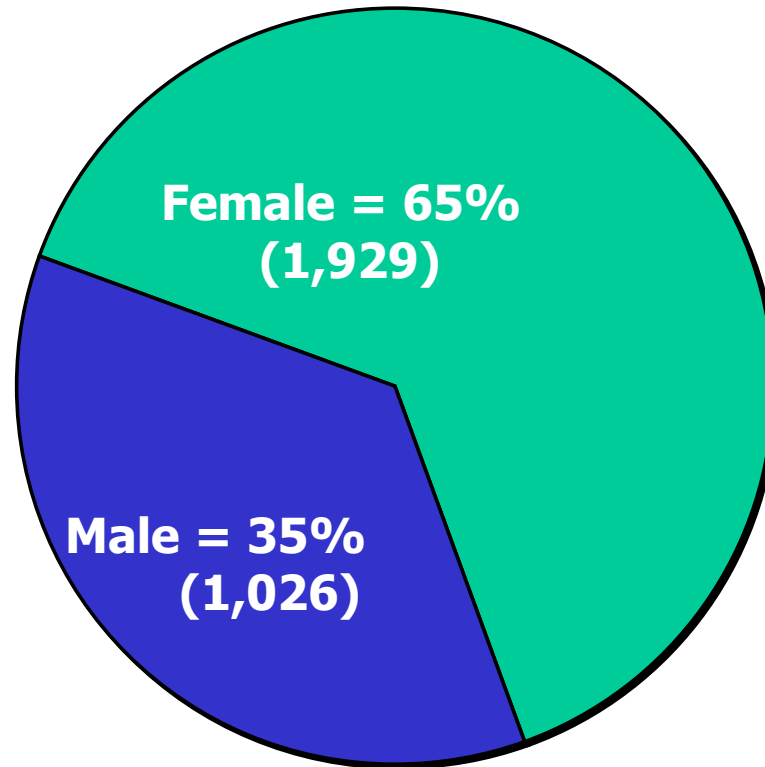


■ Pharm D ■ BS

Total = 2,955

IOWA PHARMACISTS

Gender 2020

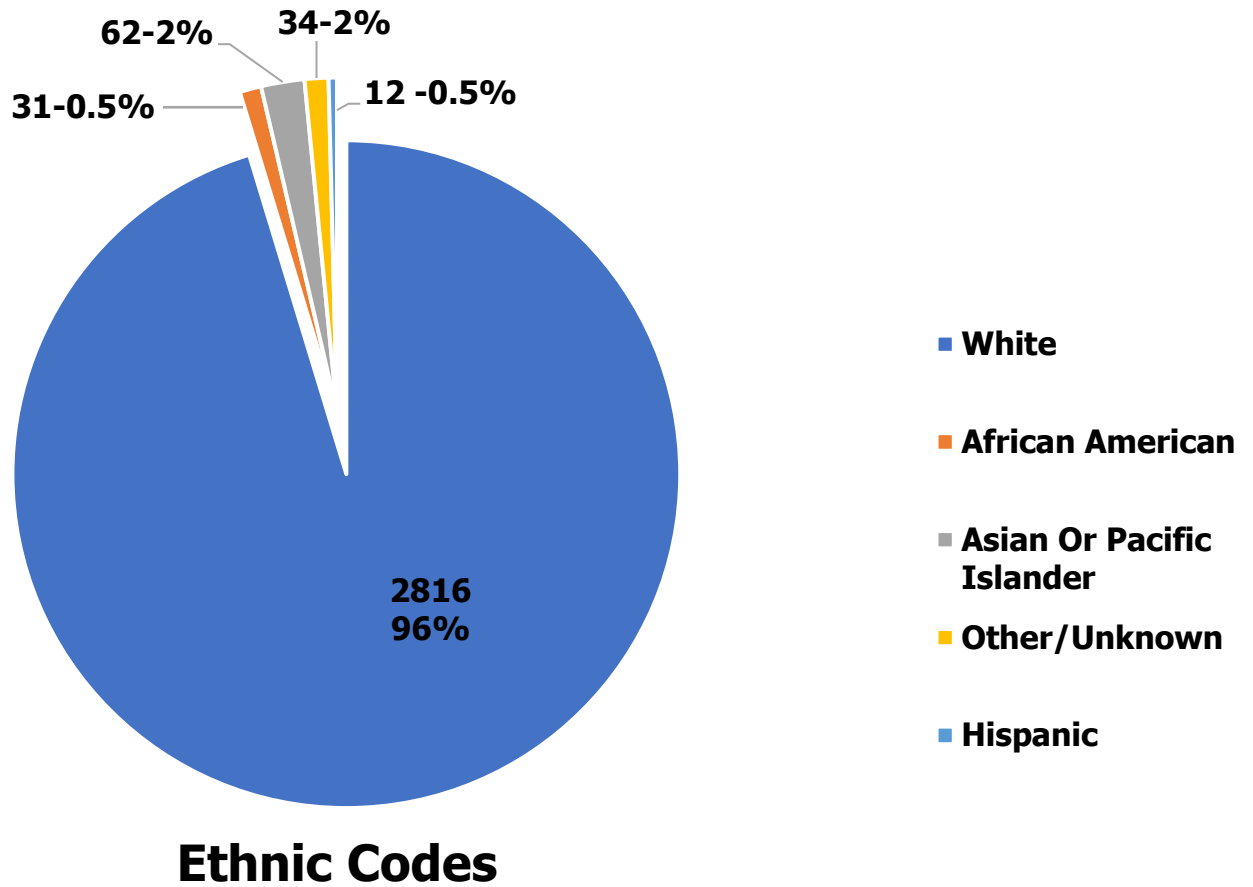


Total = 2,955

IOWA PHARMACISTS

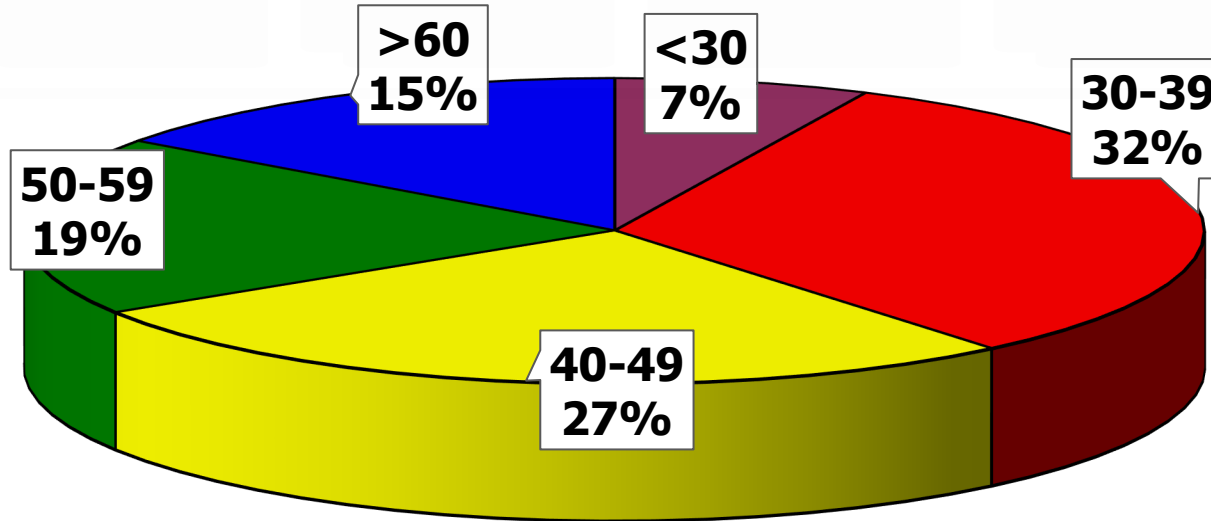
Ethnic Codes

2020



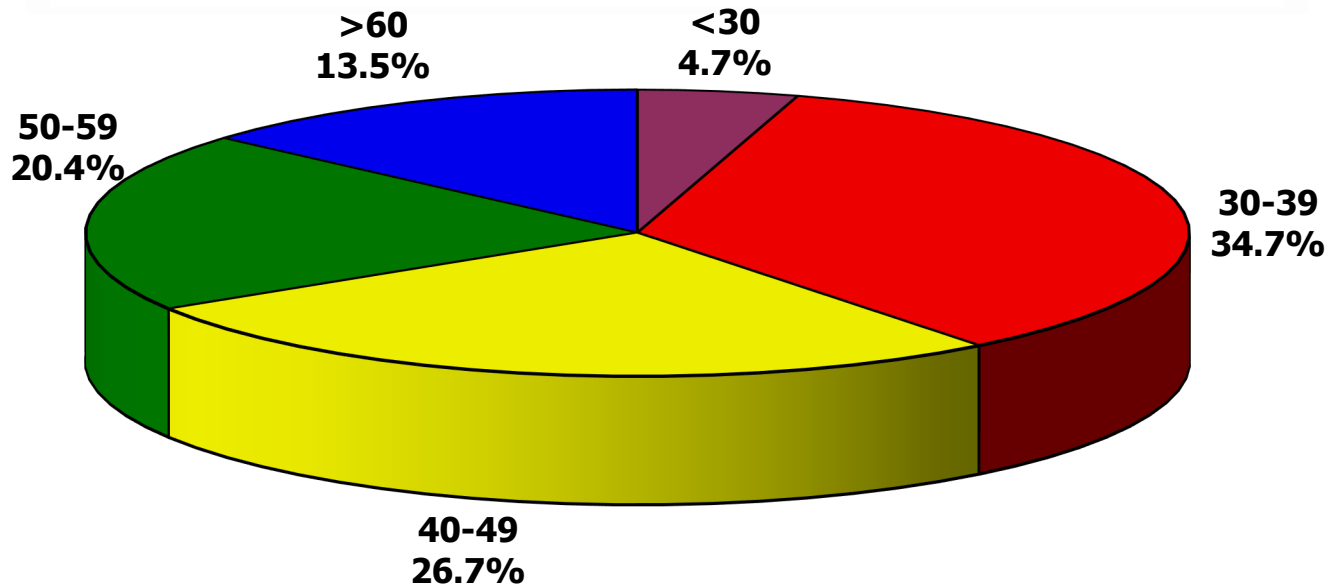
AGE DISTRIBUTION OF IOWA PHARMACISTS 2020

<u>Age Category</u>	<u>Number</u>	<u>Percent</u>	<u>Cumulative %</u>
< 30	212	7.0	7.0%
30-39	943	32.0	39.0
40-49	797	27.0	66.0
50-59	566	19.0	85.0
≥ 60	437	15.0	100.0%
	2,955	100.0%	



AGE DISTRIBUTION OF IOWA HOSPITAL PHARMACISTS 2020

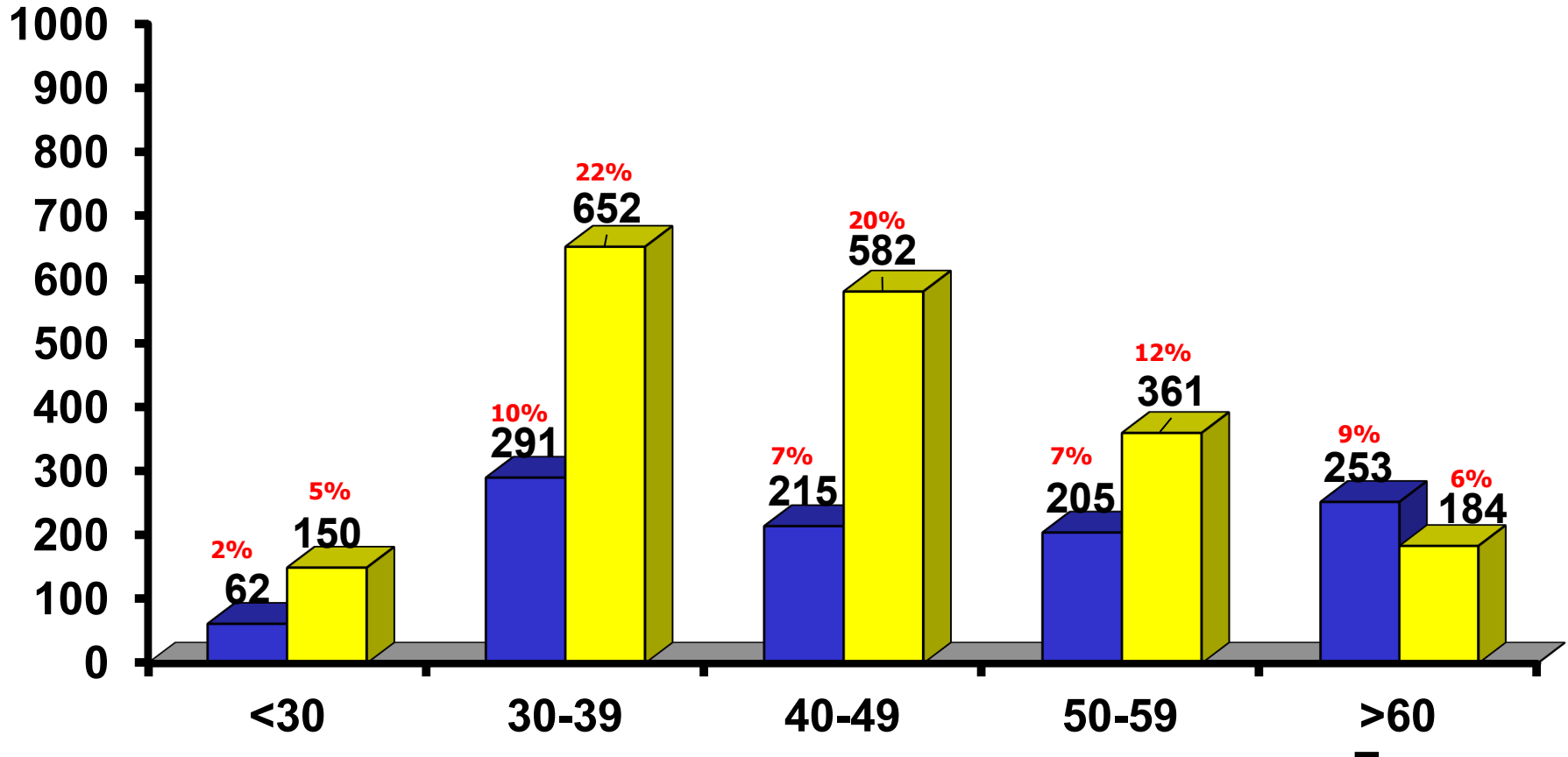
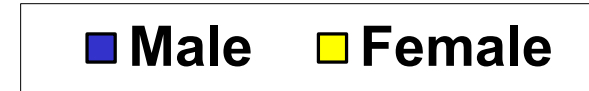
<u>Age Category</u>	<u>Number</u>	<u>Percent</u>	<u>Cumulative %</u>
< 30	38	4.7	4.7%
30-39	274	34.7	39.4
40-49	212	26.7	66.1
50-59	162	20.4	86.5
≥ 60	<u>107</u>	<u>13.5</u>	100.0 %
	793	100.0 %	



AGE DISTRIBUTION OF IOWA PHARMACISTS

GENDER

2020



IOWA PHARMACISTS

Full-Time vs. Part-Time

Gender

2020

	Full-Time*		Part-Time	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Male	942	32.0%	84	2.8%
Female	<u>1604</u>	<u>54.2%</u>	<u>325</u>	<u>11.0%</u>
Total	2546	86.2%	409	13.8%

*FT ≥ 30 hours/week

IOWA PHARMACISTS

Part-Time by Age and Gender

2020

<u>Age</u>	<u>Total Male</u>	<u>%</u>	<u>Total Female</u>	<u>%</u>	<u>PT Total</u>	<u>Total %</u>
<30	8	1.9	10	2.5	18	4.4
30-39	6	1.5	63	15.4	69	16.9
40-49	10	2.4	111	27.2	121	29.6
50-59	15	3.7	93	22.7	108	26.4
≥60	<u>45</u>	<u>11.0</u>	<u>48</u>	<u>11.7</u>	<u>93</u>	<u>22.7</u>
	84	20.5%	325	79.5%	409	100%

IOWA PHARMACISTS

Retirement Summary

2020

Retirements = 15

Mean Age = 68

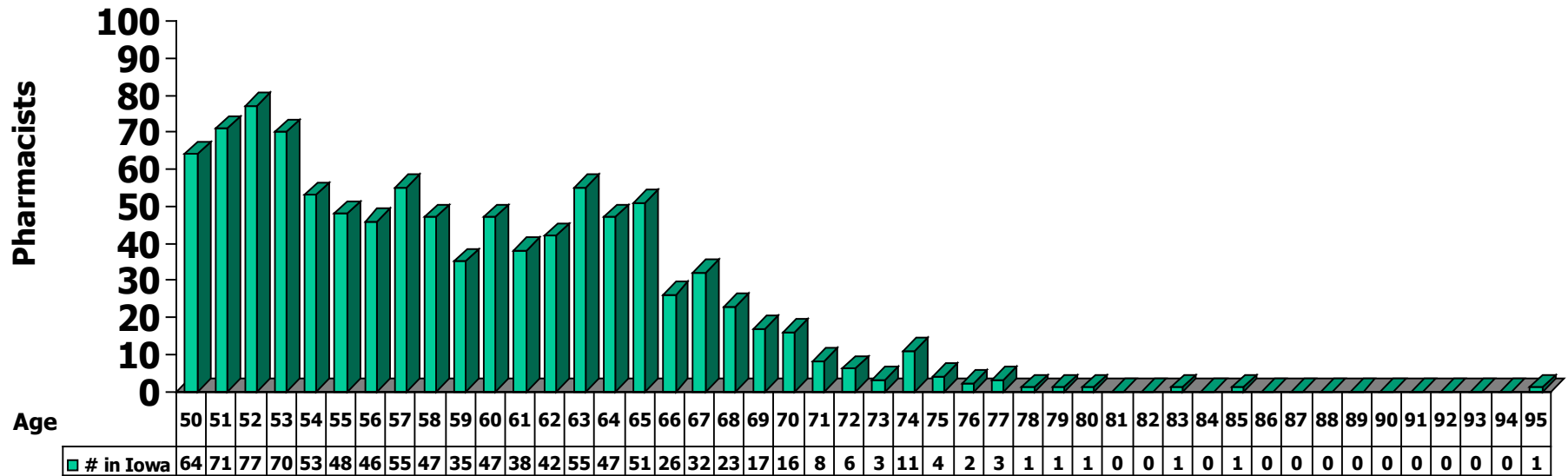
Median Age = 68

Note: Average Retirements over last 5 years = 38

IOWA PHARMACISTS

Detail of Age ≥ 50

2020



Total number of pharmacists 50 years of age and older = 1003 (34%)

IOWA PHARMACISTS

Principal Activity

2020

<u>Activity</u>	<u># of Pharmacists</u>	<u>Percent</u>
Community*	1662	56.2%
Hospital	793	26.8
State/Federal Government**	166	5.6
Consultant (Long Term Care)	85	2.9
Academic**	73	2.5
Administrative/Management	69	2.3
Home Infusion Therapy	30	1.0
Other (Service Ctr-Web, Dental, Research)	27	1.0
Public/Community Health	17	0.6
Nuclear	12	0.4
Veterinary	9	0.3
Pharmaceutical Industry	8	0.3
Student Health	4	0.1
Total	2955	100.0%

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

**Includes non-Iowa-licensed pharmacists

IOWA COMMUNITY PHARMACISTS

By Activity

2020

<u>Activity</u>	<u># of Pharmacists</u>	<u>Percent</u>	<u># of Worksites</u>
Chain	1081	65.0%	395
Independent	315	19.0	138
Hospital-Sponsored	136	8.2	57
Franchise	104	6.3	55
Other (Not Hospital Sponsored)	15	0.9	4
Company Sponsored	9	0.5	4
Relief	<u>2</u>	<u>0.1</u>	<u>2</u>
Total	1662	100.0%	655

IOWA PHARMACISTS

Iowa Birth and UI Education 2020

	1998		2020	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
All Iowa Pharmacists	2391	100.0%	2955	100.0%
Iowa Birthstate	1633	68.3%	1906	64.5%
UI Pharmacy Graduate	1089	45.5%	1373	46.4%
IA Birth and UI Graduate	896	37.5%	1122	38.0%

IOWA PHARMACISTS with UI Education or Graduate Training 2020

		<u>% of Total</u>	<u>Cumulative %</u>	<u>Number</u>	<u>% of Total</u>
•Pharmacists w/ UI Educational Experience					
—Pharmacy School (only)	1254	42.4%	42.4%	1430	48.4%
—Pharmacy School/Residency	119	4.0%	46.4%		
—Residency (only)	57	2.0%	48.4%		
Subtotals	1430	48.4%			
•No UI Educational Experience					
				1525	51.6%
			Totals	2955	100.00%

Source: Iowa Health Professions Tracking Center, Office of Statewide Clinical Education Programs
University of Iowa Carver College of Medicine, August 2021

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IOWA PHARMACISTS

Iowa Birth and Drake Education 2020

	1998		2020	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
All Iowa Pharmacists	2391	100.0%	2955	100.0%
Iowa Birthstate	1633	68.3%	1906	64.5%
Drake Pharmacy Graduate	658	27.5%	818	27.7%
IA Birth and Drake Graduate	465	19.4%	534	18.1%

IOWA PHARMACISTS with Drake Education or Graduate Training 2020

		<u>% of Total</u>	<u>Cumulative %</u>	<u>Number</u>	<u>% of Total</u>
•Pharmacists w/ Drake Ed. Exp.					
—Pharmacy School (only)	806	27.3%	27.3%		
—Pharmacy School/Residency	18	0.6%	27.9%		
—Residency (only)	<u>9</u>	<u>0.3%</u>	<u>28.2%</u>		
Subtotals	833	28.2%			
•No Drake Ed. Exp.					
				<u>2122</u>	<u>71.8%</u>
			Totals	2955	100.00%

IOWA COMMUNITY PHARMACISTS

Distribution by Community Size

2020

<u>Community Population</u>	<u>Number of RPh</u>	<u>Percent</u>	<u>Cumulative Percent</u>
> 5,000	294	17.7%	17.7%
5,000 – 14,999	429	25.8	43.5
15,000 – 49,999	317	19.1	62.6
50,000 – 99,999	387	23.3	85.9
≥ 100,000	<u>235</u>	<u>14.1</u>	100.0%
Total	1662	100.0%	

IOWA INDEPENDENT PHARMACISTS

Distribution by Community Size

2020

<u>Community Population</u>	<u># of RPh</u>	<u>Percent</u>	<u>Cumulative Percent</u>
< 5,000	124	39.4%	39.4%
5,000 – 14,999	102	32.4	71.8
15,000 – 49,999	25	7.9	79.7
50,000 – 99,999	46	14.6	94.3
≥ 100,000	<u>18</u>	<u>5.7</u>	100.0%
Total	315	100.0%	

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

IOWA HOSPITAL PHARMACISTS

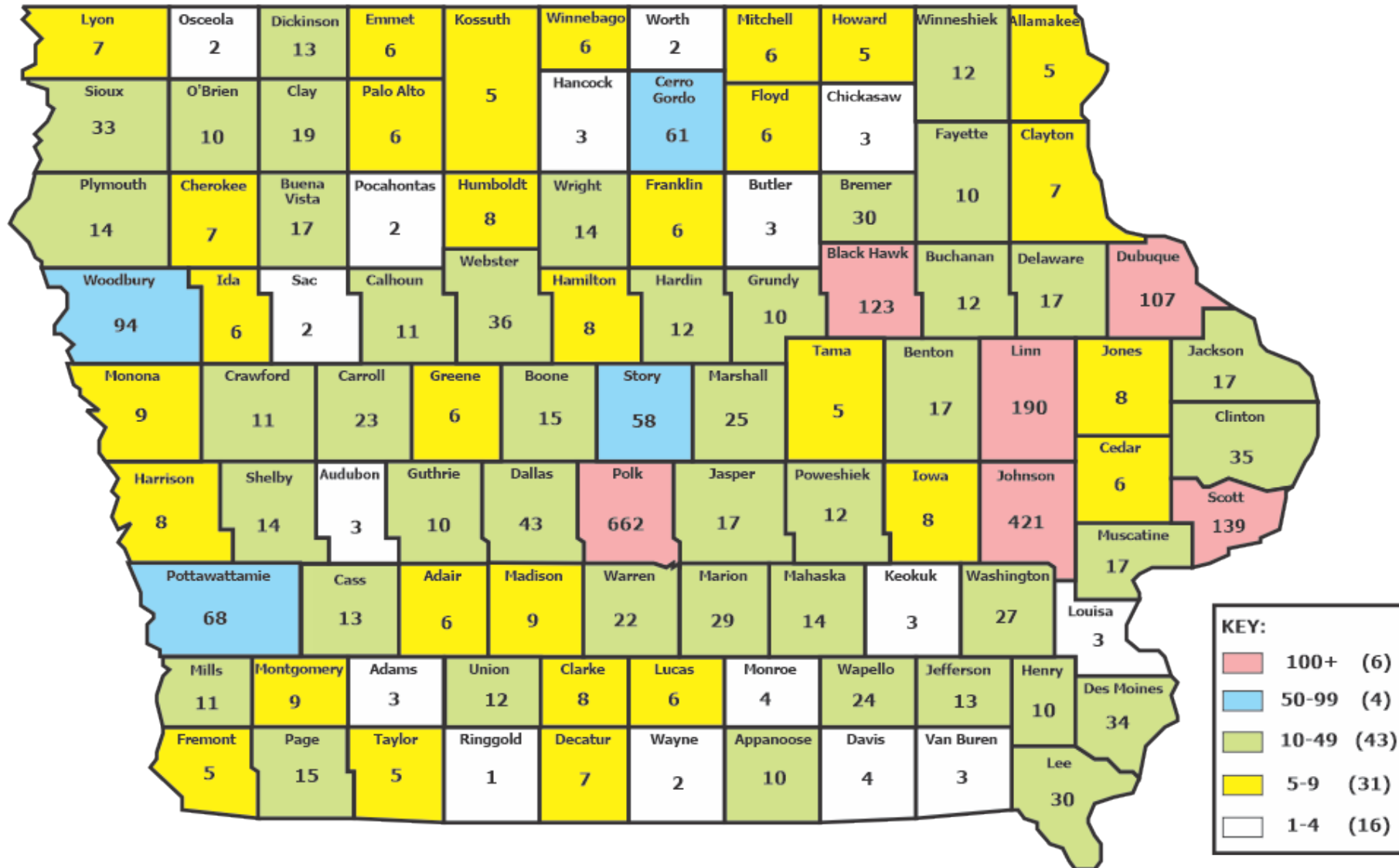
Distribution by Community Size

2020

<u>Community Population</u>	<u># of RPh</u>	<u>Percent</u>	<u>Cumulative Percent</u>
< 5,000	70	8.8%	8.8%
5,000 – 14,999	100	12.6	21.4
15,000 – 49,999	54	6.8	28.2
50,000 – 99,999	364	45.9	<u>74.1</u>
≥ 100,000	<u>205</u>	<u>25.9</u>	100.0%
Total	793	100.0%	

Geographic Distributions

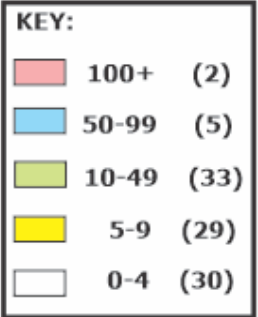
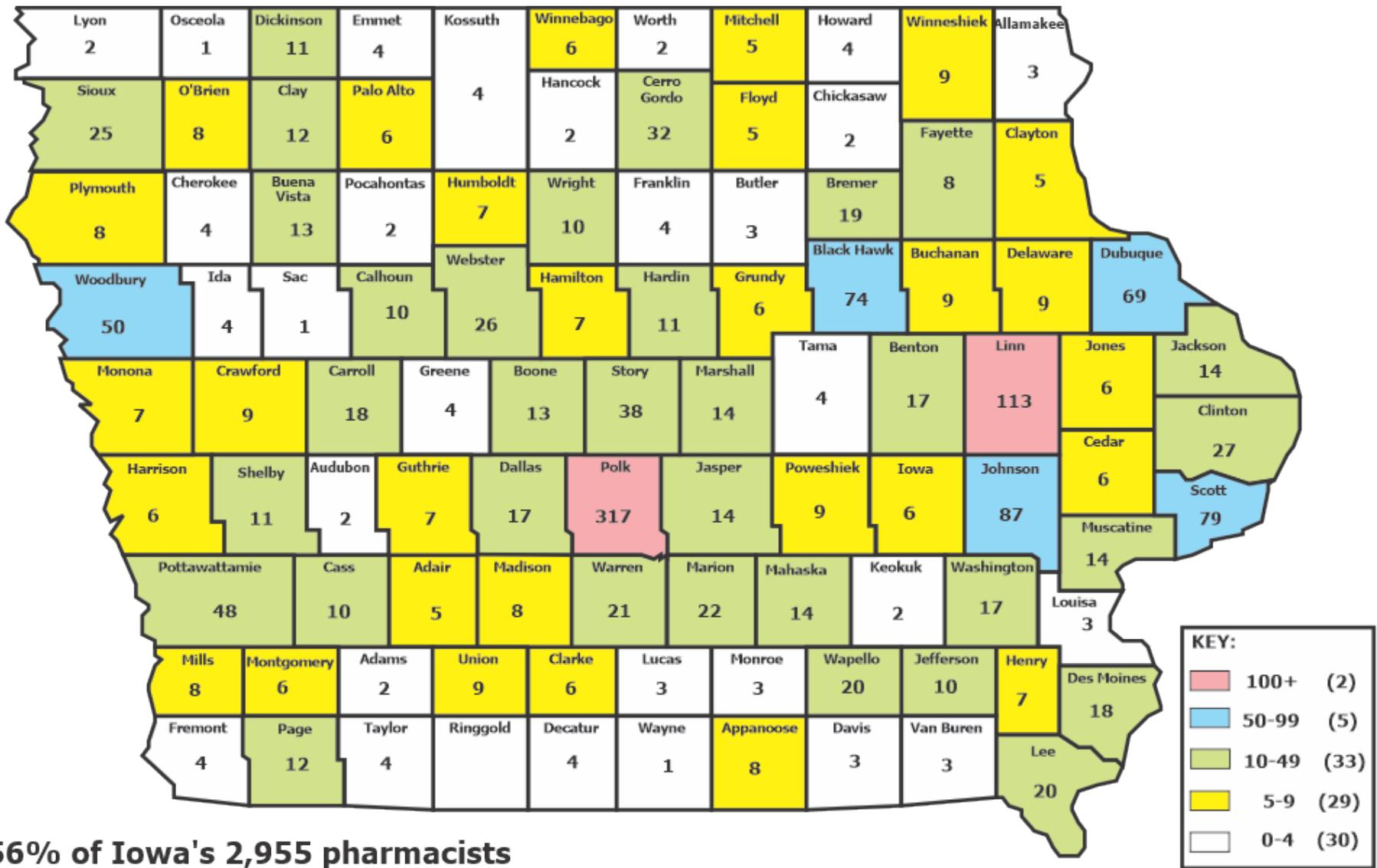
IOWA PHARMACISTS All Activities (2,955) 2020



IOWA PHARMACISTS

Community Pharmacists (1,662*)

2020

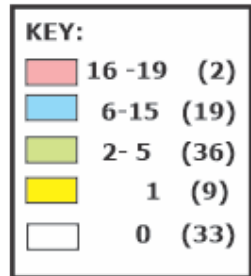
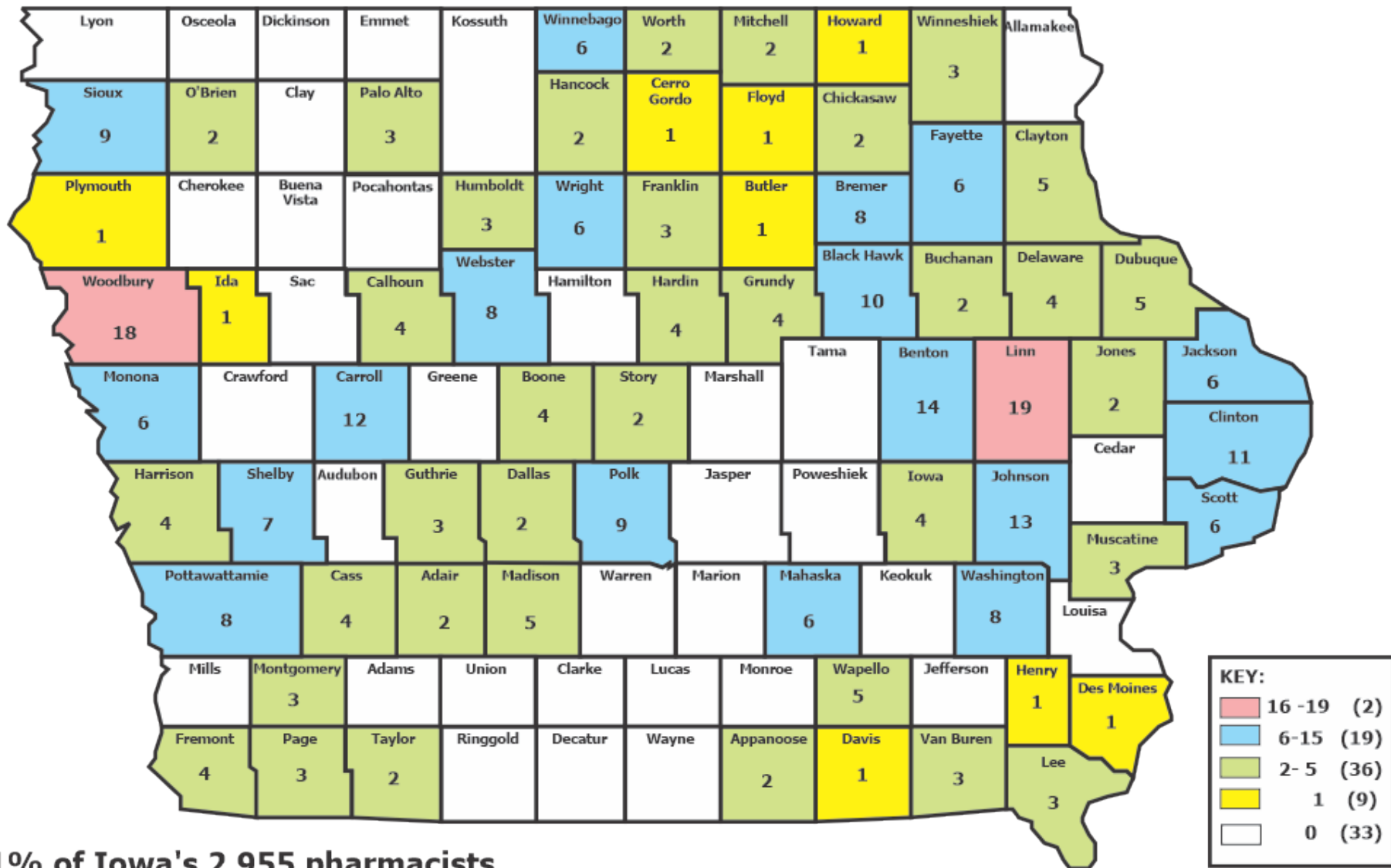


***56% of Iowa's 2,955 pharmacists**

IOWA PHARMACISTS

Independent Pharmacists (315*)

2020

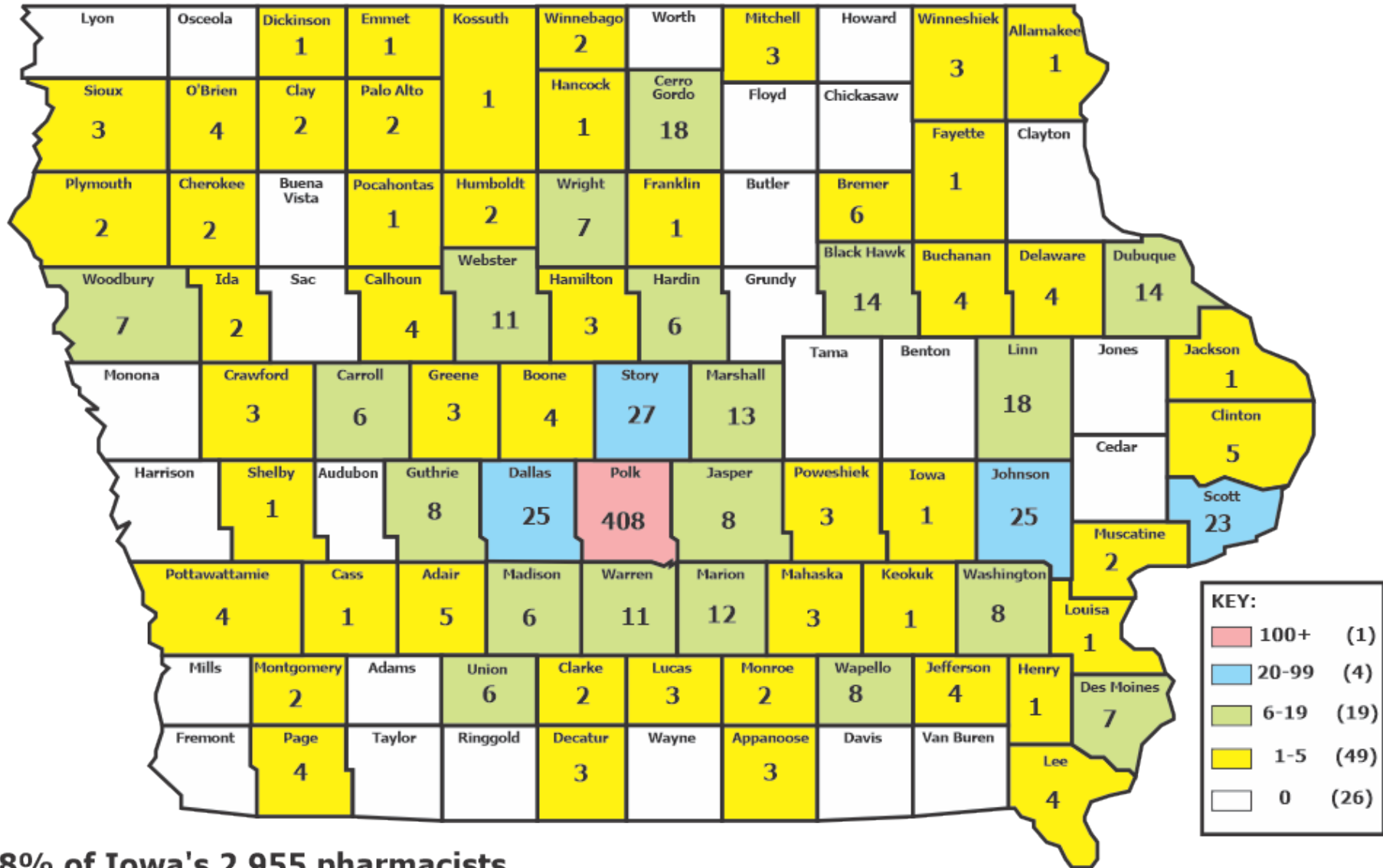


***11% of Iowa's 2,955 pharmacists**

DRAKE PHARMACY GRADUATES (818*)

All Professional Activities

2020

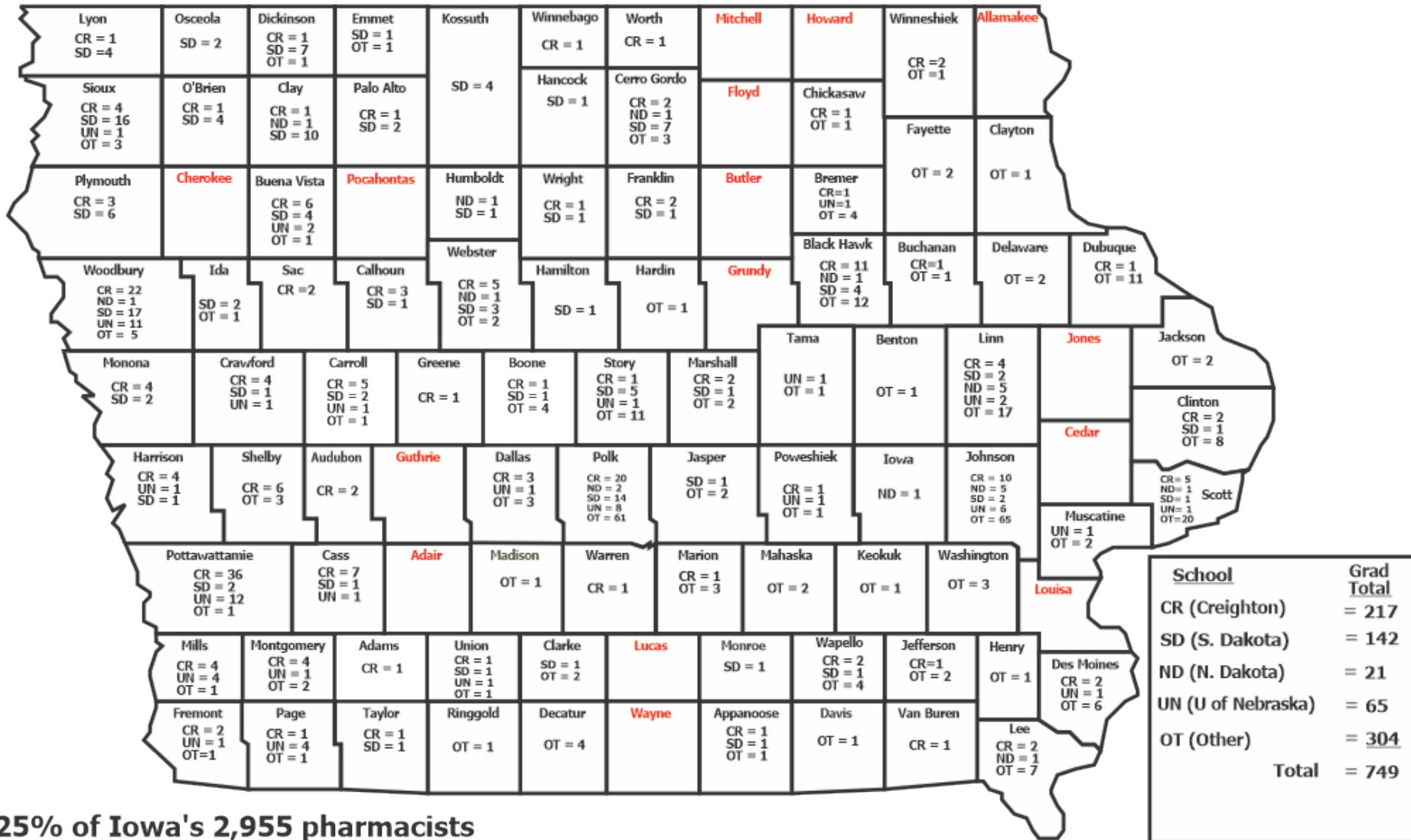


KEY:

100+	(1)
20-99	(4)
6-19	(19)
1-5	(49)
0	(26)

***28% of Iowa's 2,955 pharmacists**

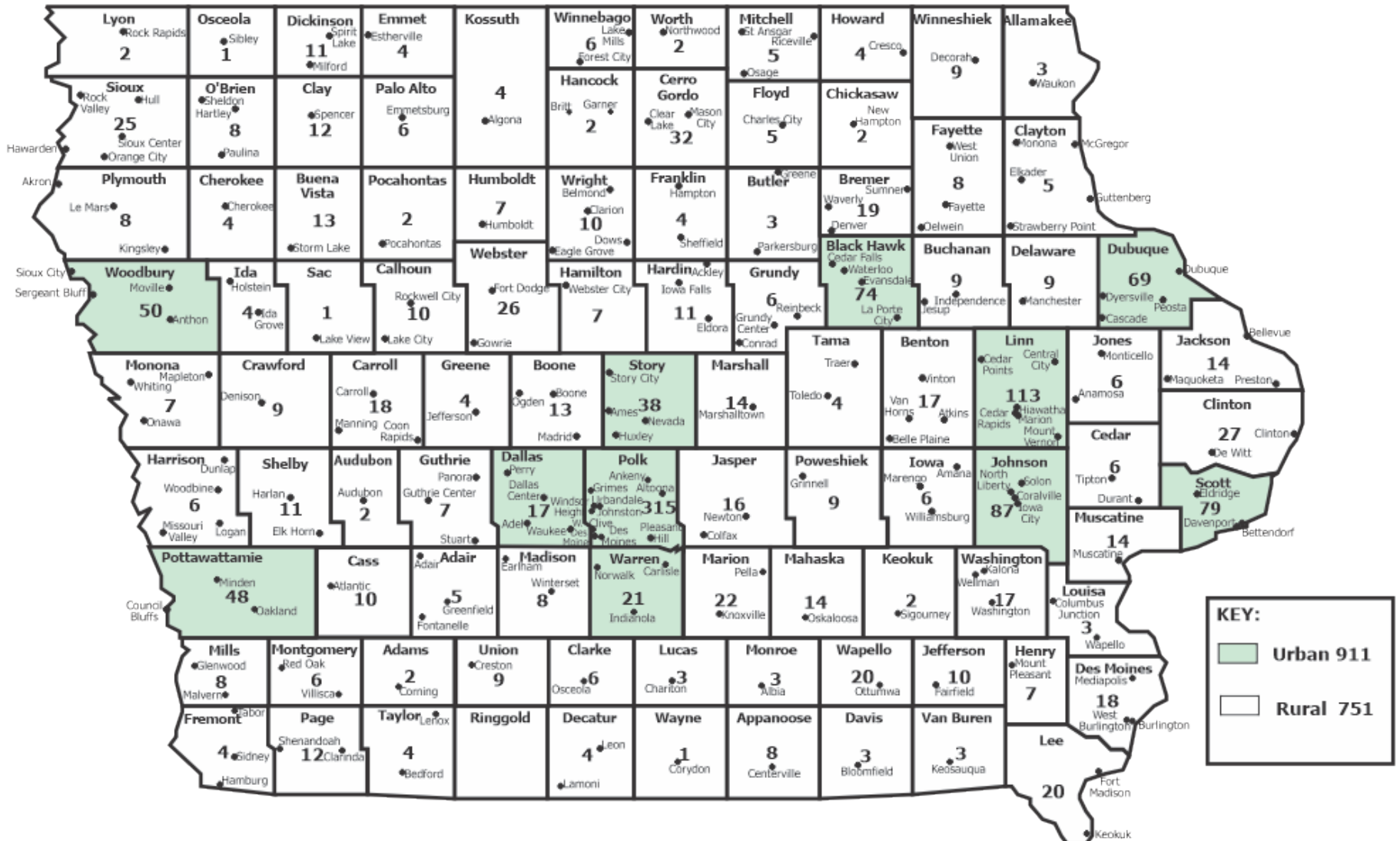
DISTRIBUTION OF PHARMACY GRADUATES FROM COLLEGES OTHER THAN UI AND DRAKE* 2020



IOWA PHARMACISTS

Community Pharmacist (1,662)*

2020

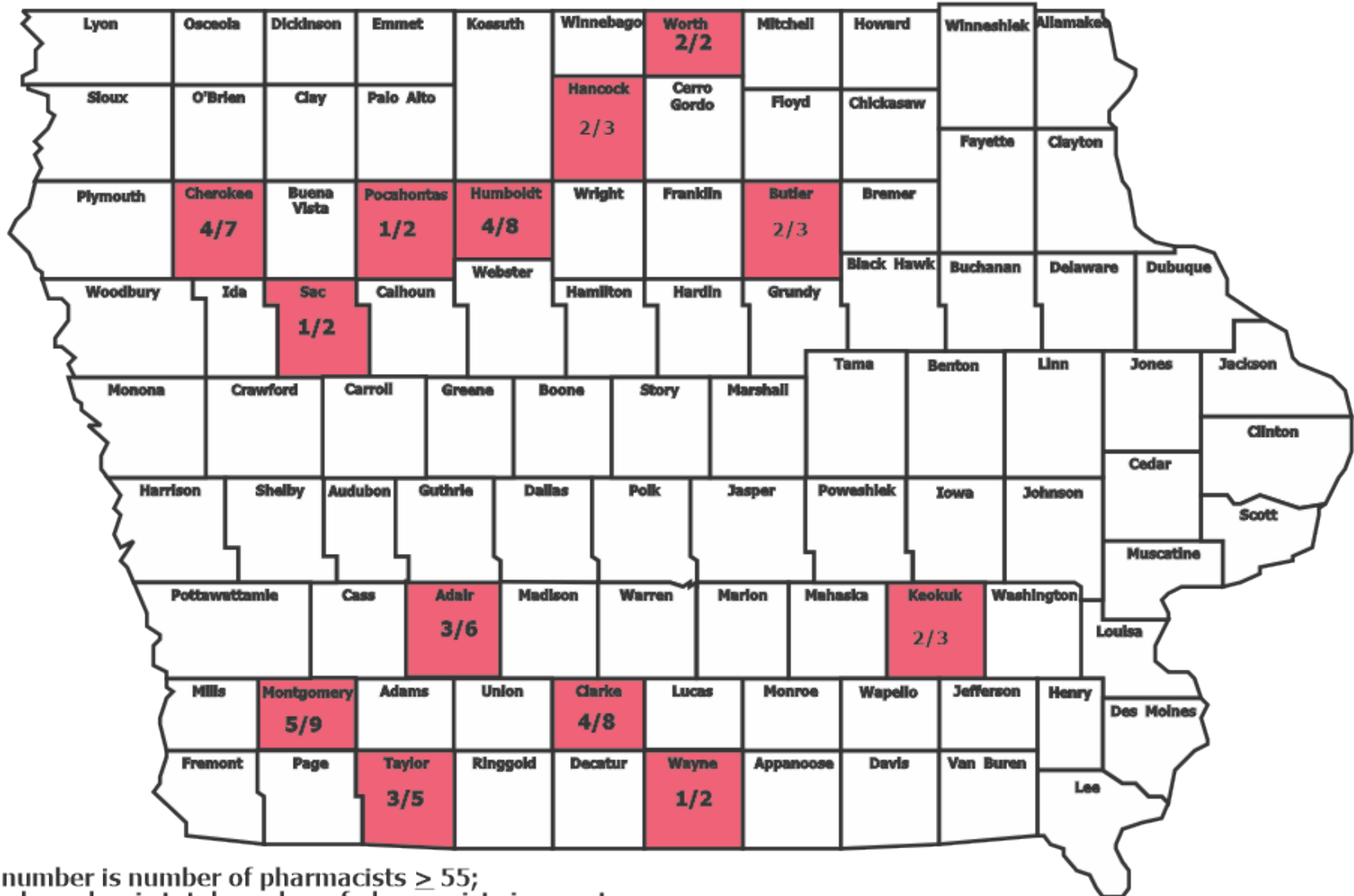


KEY:

- Urban 911
- Rural 751

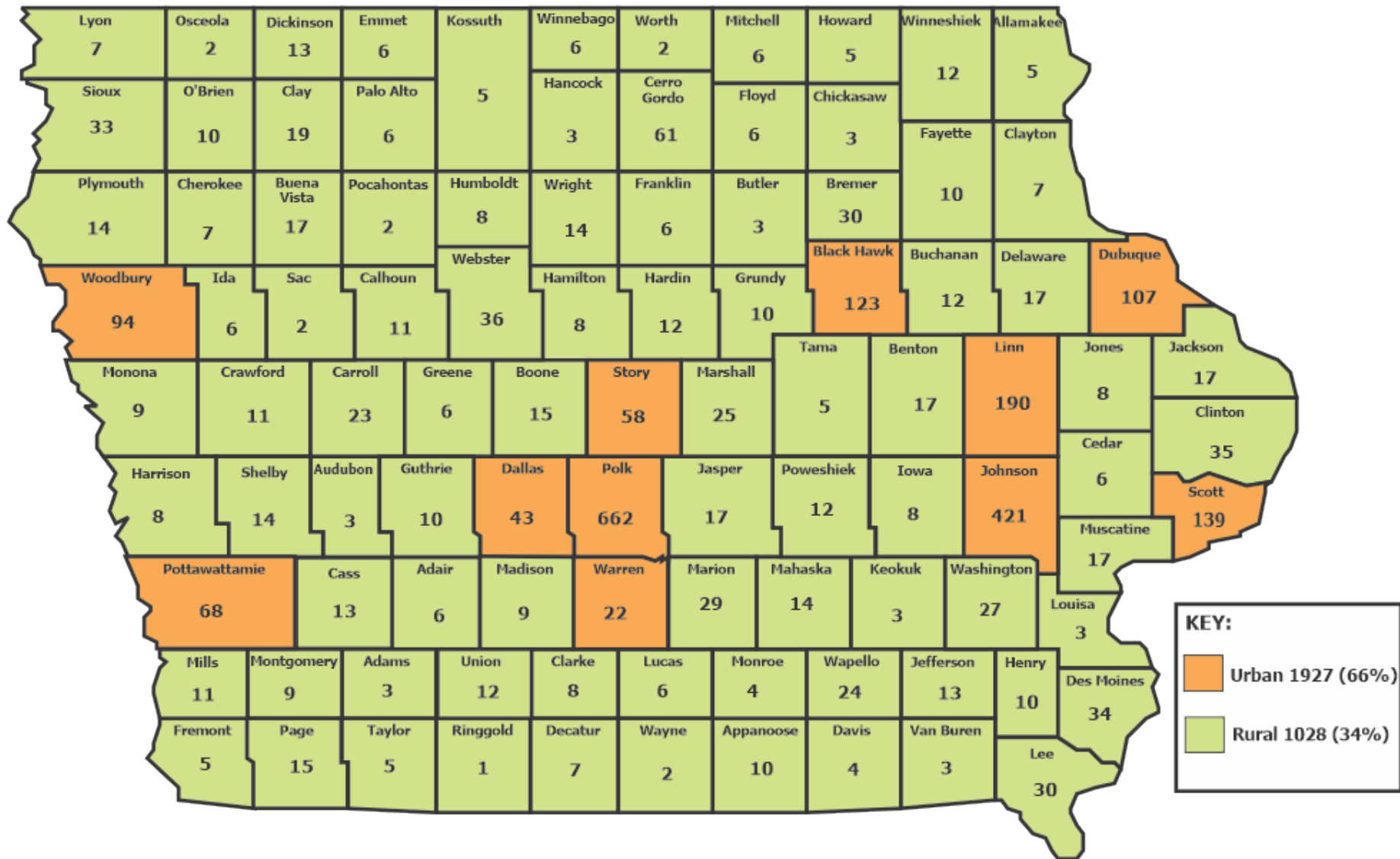
*56% of the total Iowa's 2,955 pharmacists in year end 2020

IOWA COUNTIES WITH 50% OF PHARMACISTS > AGE 55 All Professional Activities 2020



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

DISTRIBUTION OF ALL PHARMACIST (2,955) By Rural vs. Urban 2020

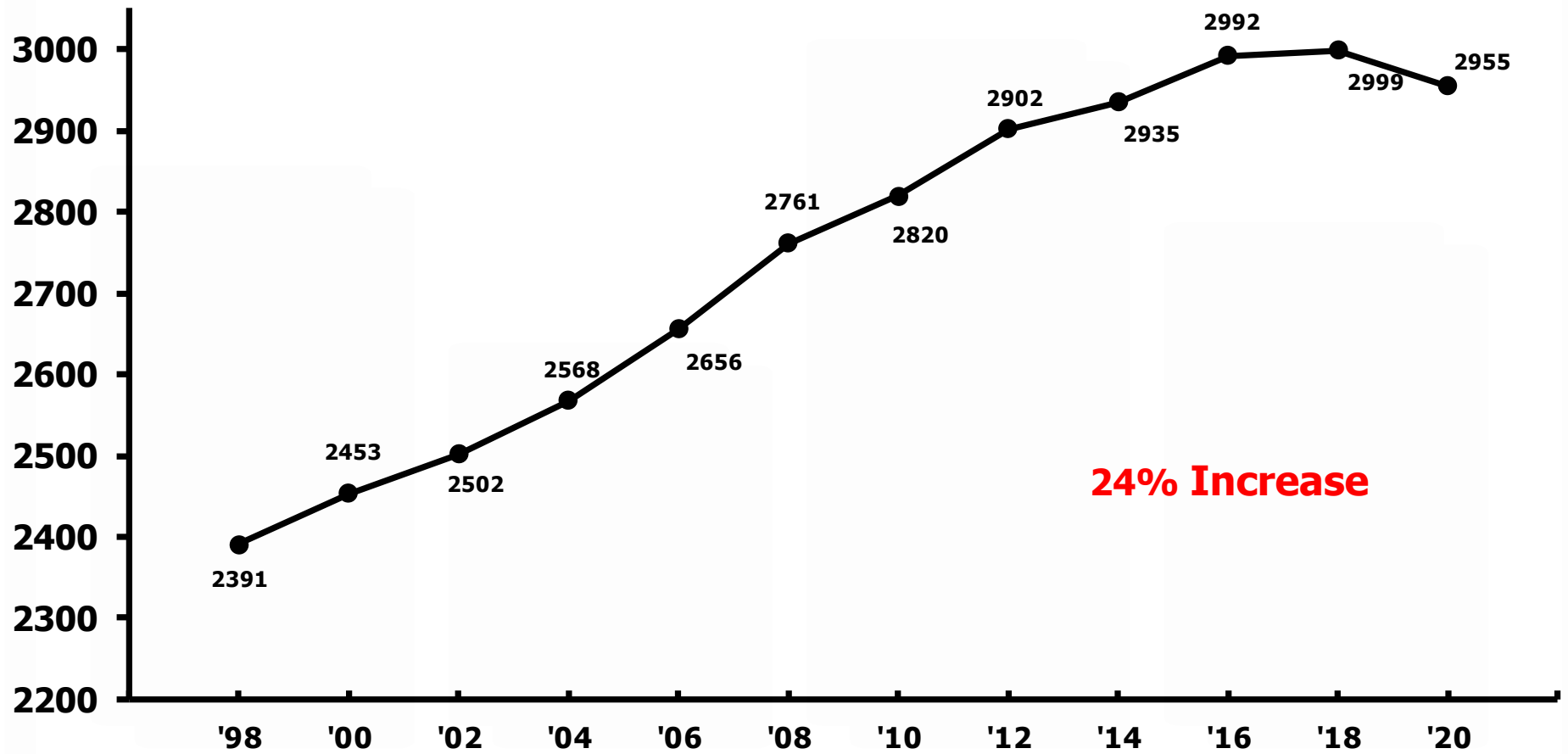


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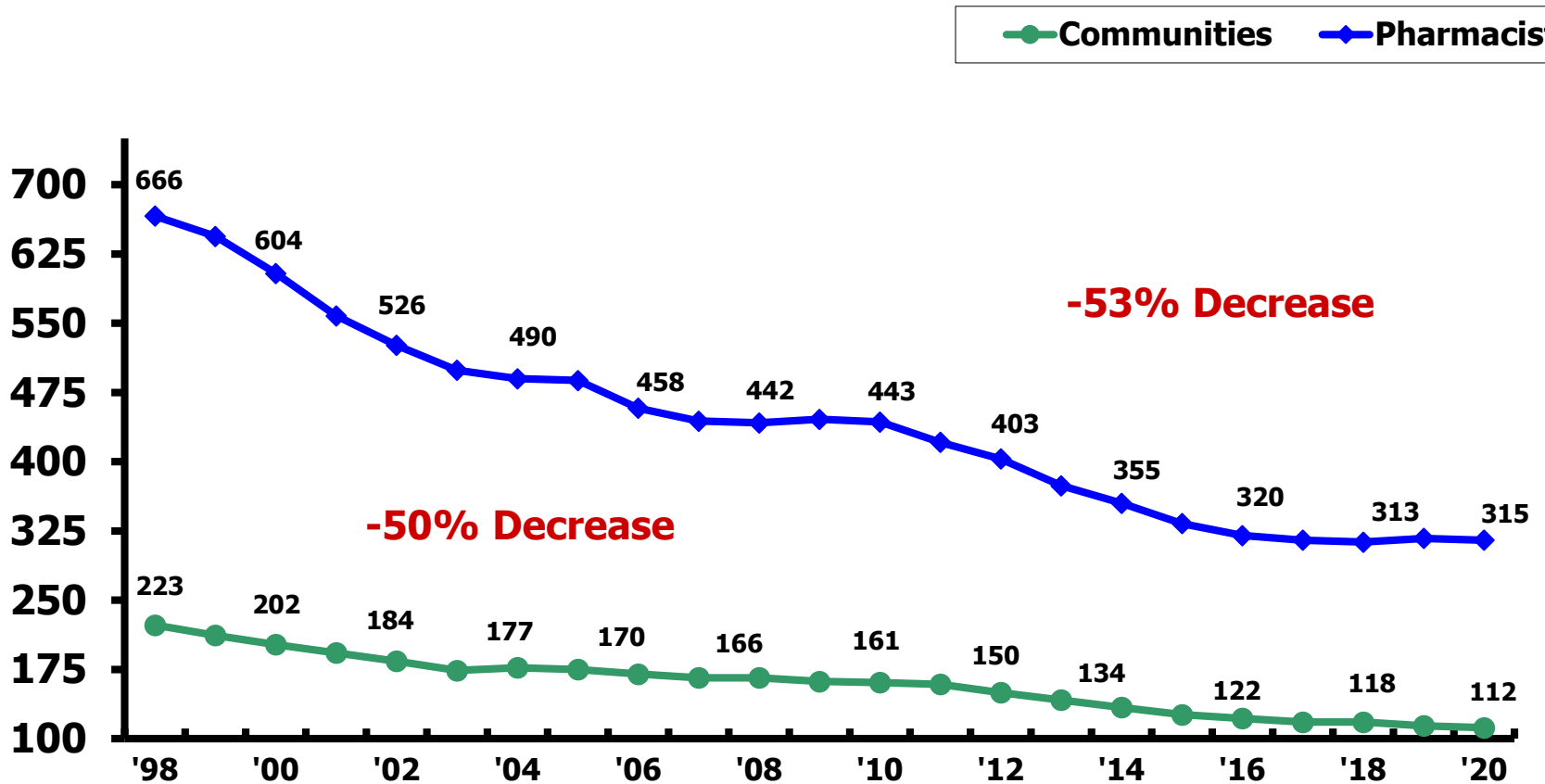
- Urban 1927 (66%)
- Rural 1028 (34%)

Trends

IOWA PHARMACISTS 1998 - 2020



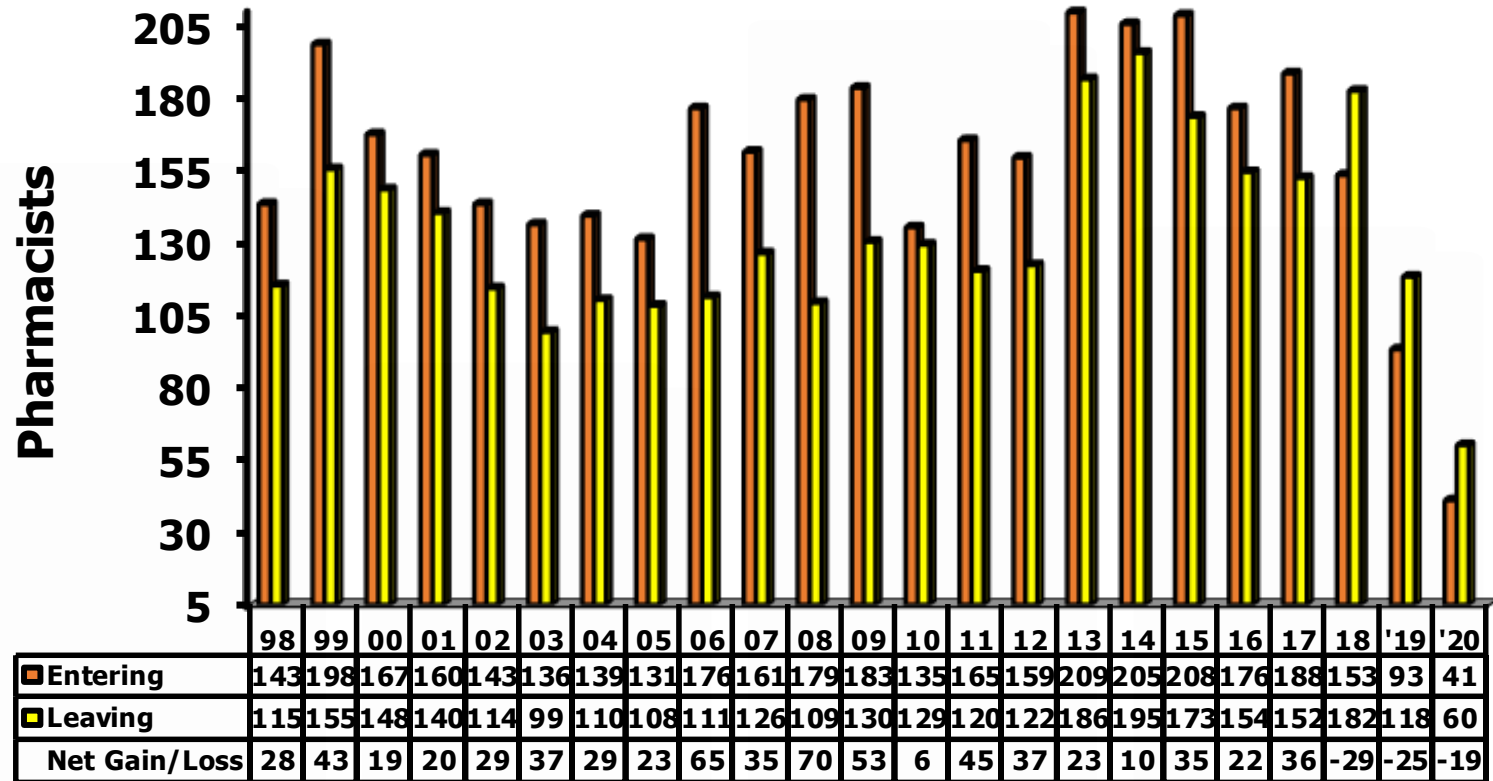
IOWA COMMUNITIES WITH INDEPENDENT PHARMACISTS 1998 - 2020



IOWA PHARMACISTS

Net Gain/Loss

1998 - 2020

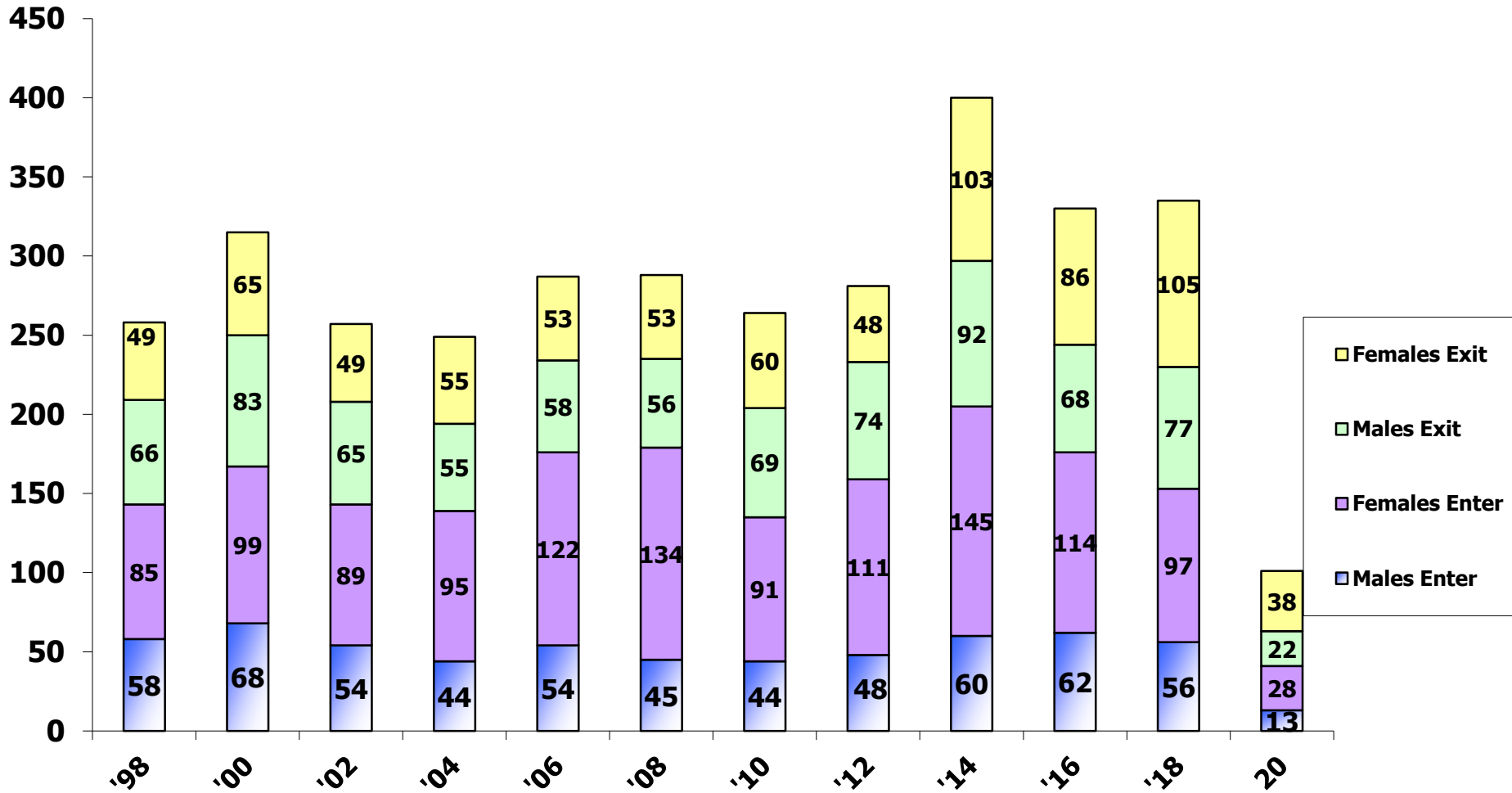


Average Net Gain/Loss = 26/year
 5-Year Average Net Gain/Loss = -3/yr

ALL IOWA PHARMACISTS

Entry/Exit by Gender

1998-2020



IOWA PHARMACISTS BY ACTIVITY

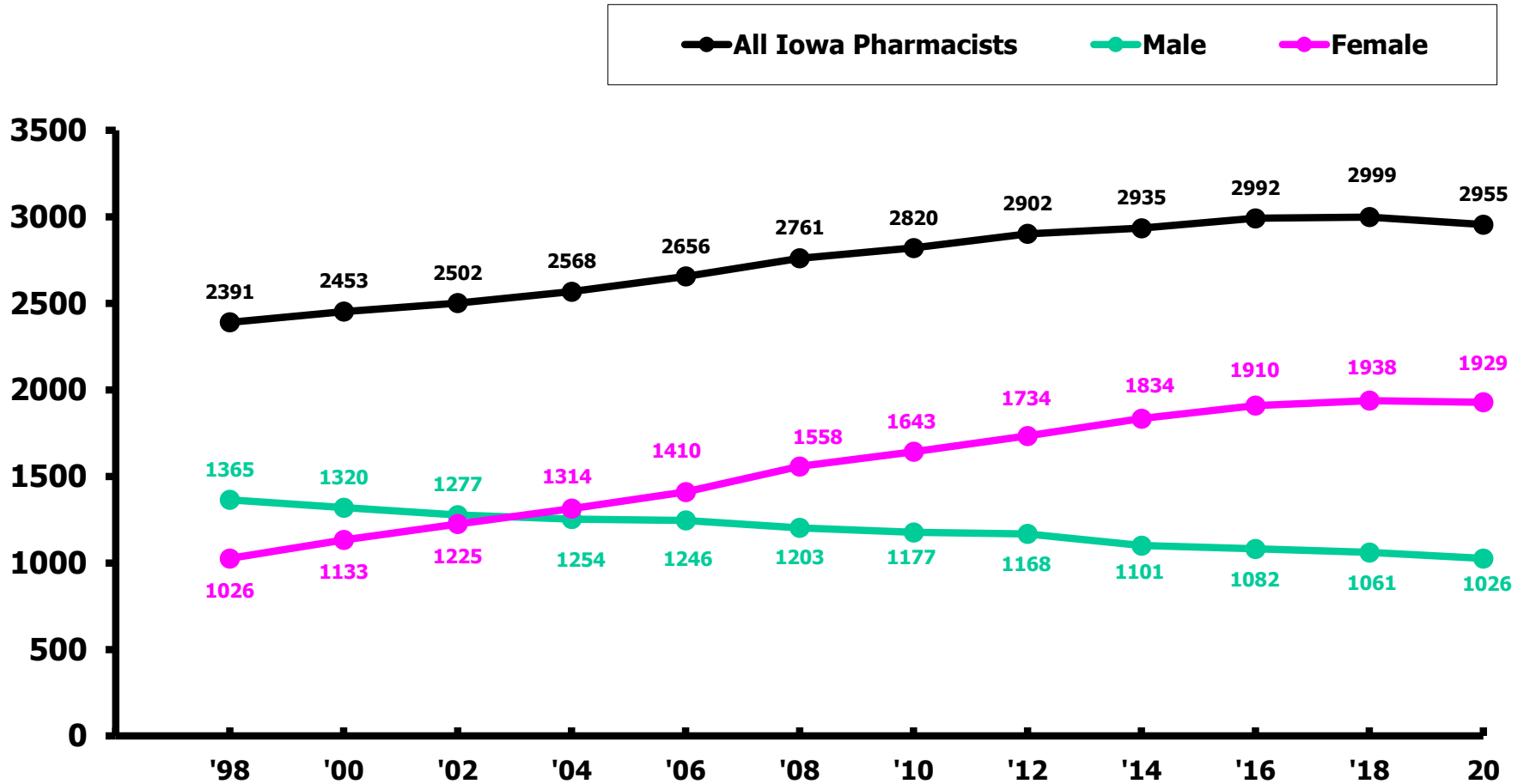
Net Increase/Decrease 1998 vs. 2020

	<u>1998</u>	<u>2020</u>	<u>Change (%)</u>
• All Active Pharmacists	2391	2955	+564 (+24%)
• Community Pharmacists	1578	1662	+ 84 (+5%)
• Hospital Pharmacists	499	793	+294 (+59%)
• All Other Pharmacists	314	500	+186 (+59%)

IOWA PHARMACISTS

Gender

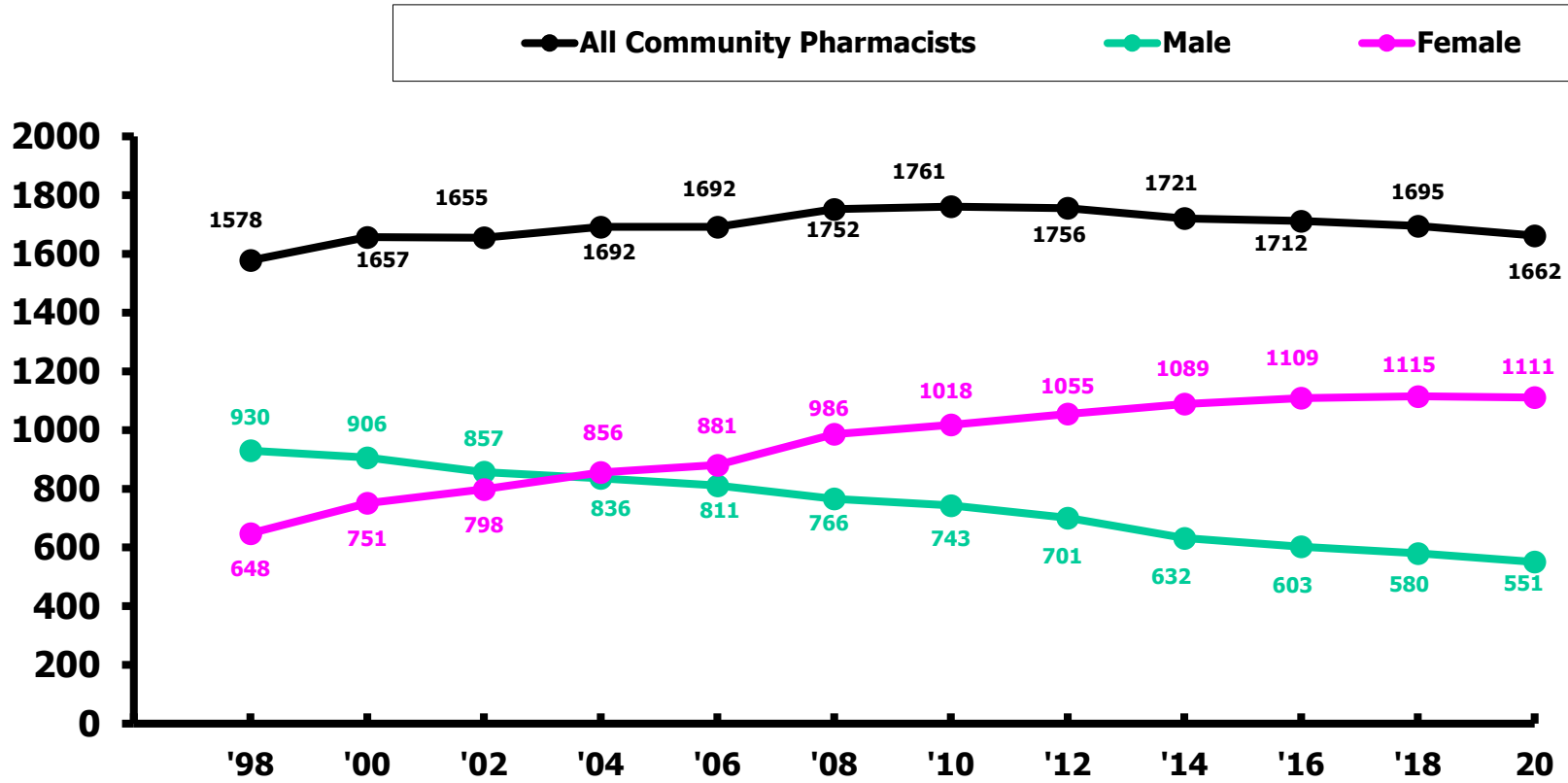
1998 - 2020



IOWA COMMUNITY PHARMACISTS

Gender

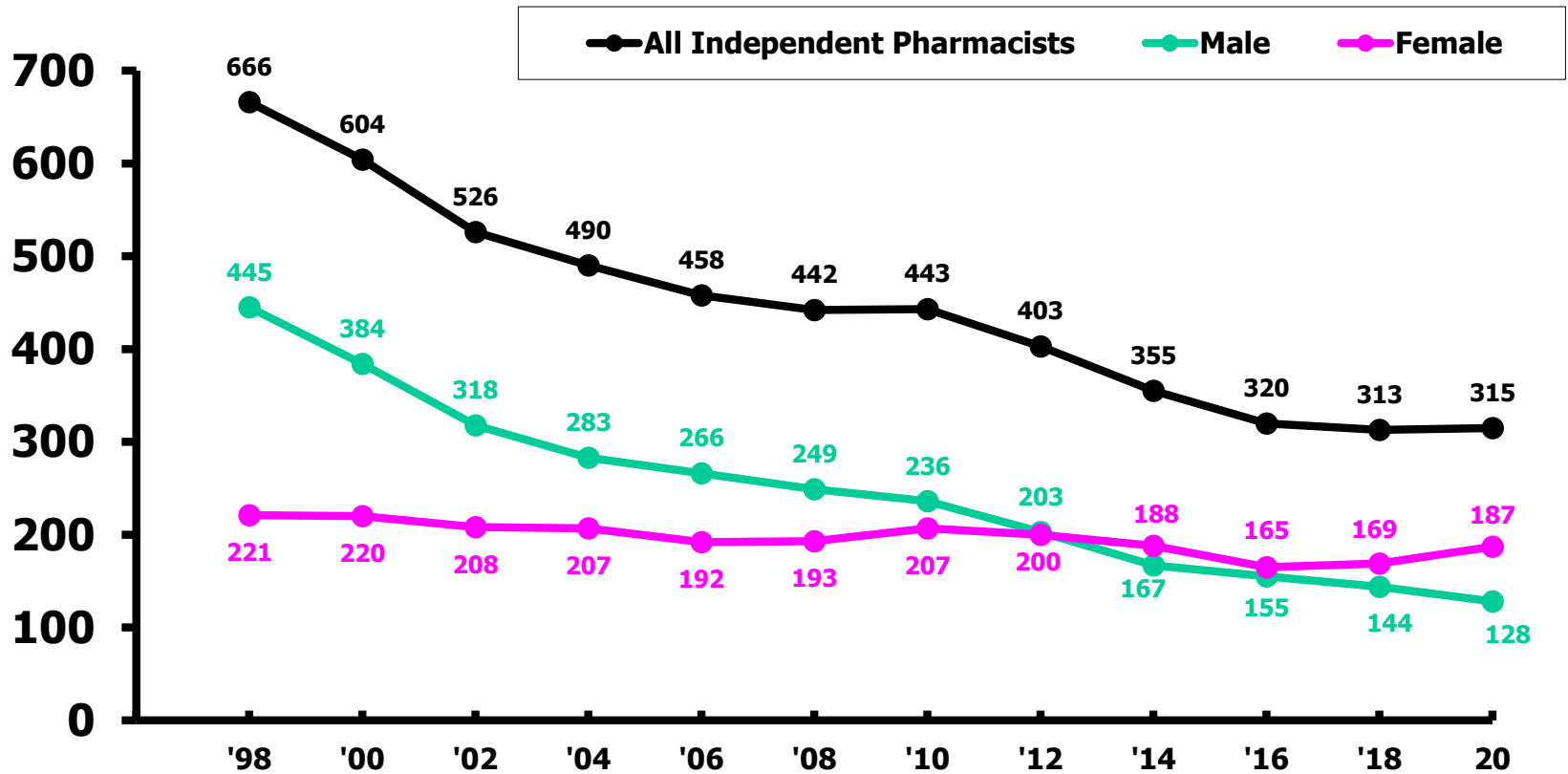
1998 - 2020



IOWA INDEPENDENT PHARMACISTS

Gender

1998 - 2020



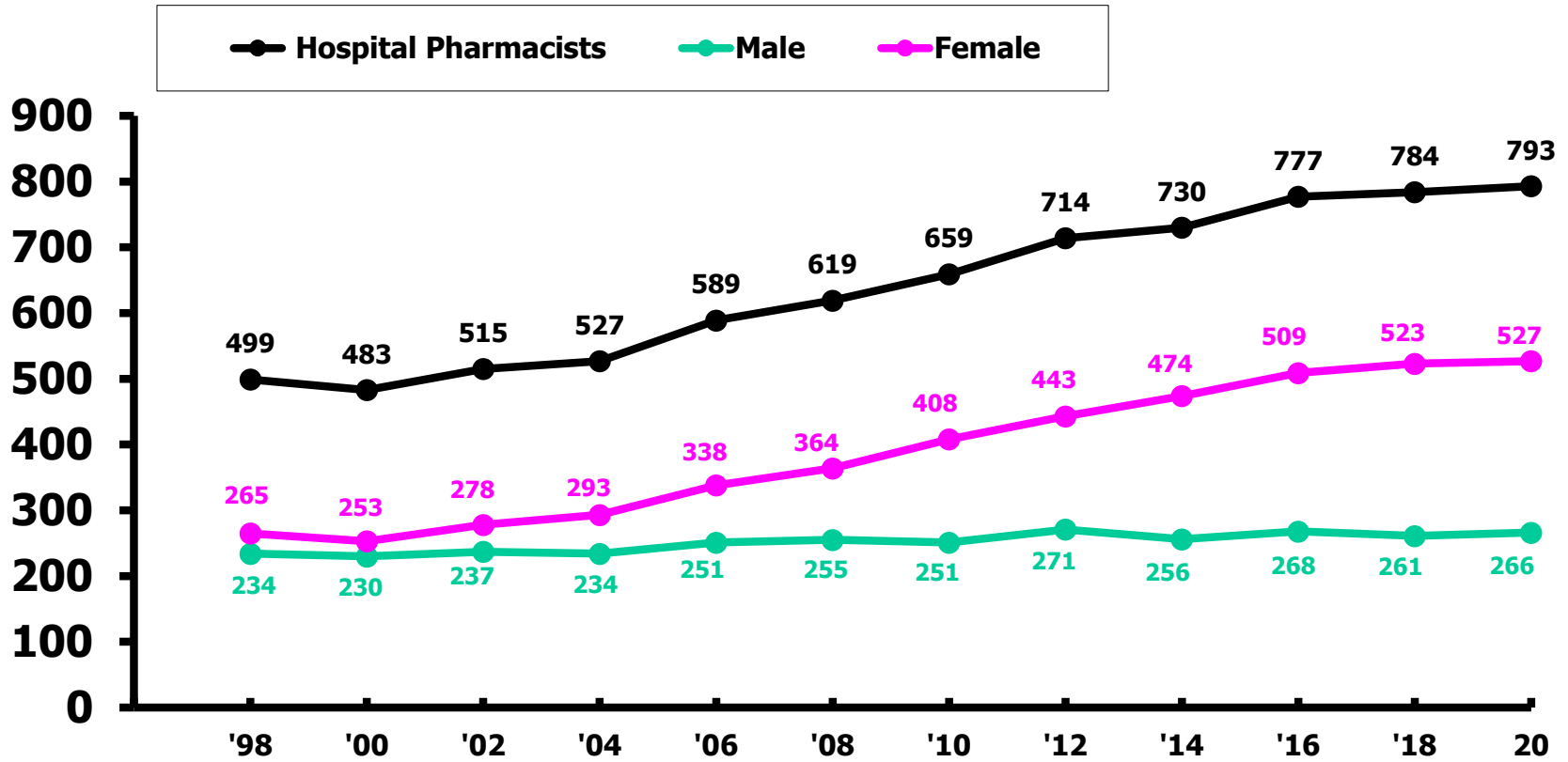
Source: Iowa Health Professions Tracking Center, Office of Statewide Clinical Education Programs
 UI Carver College of Medicine, August 2021

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IOWA HOSPITAL PHARMACISTS

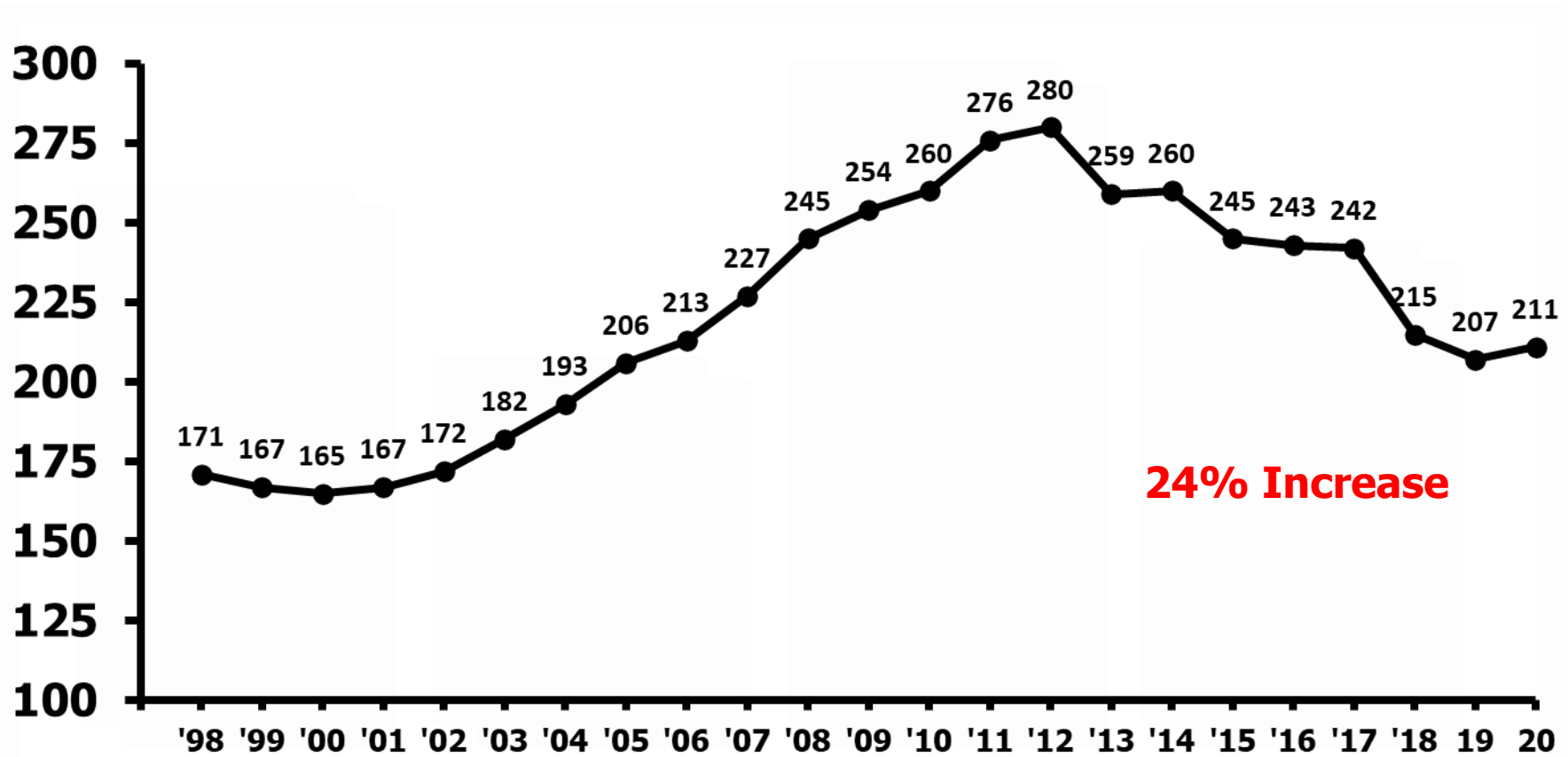
Gender

1998 - 2020



IOWA PHARMACISTS

Age \geq 55 with Population \leq 10,000 1998 - 2020



IOWA PHARMACISTS

Attrition Analysis

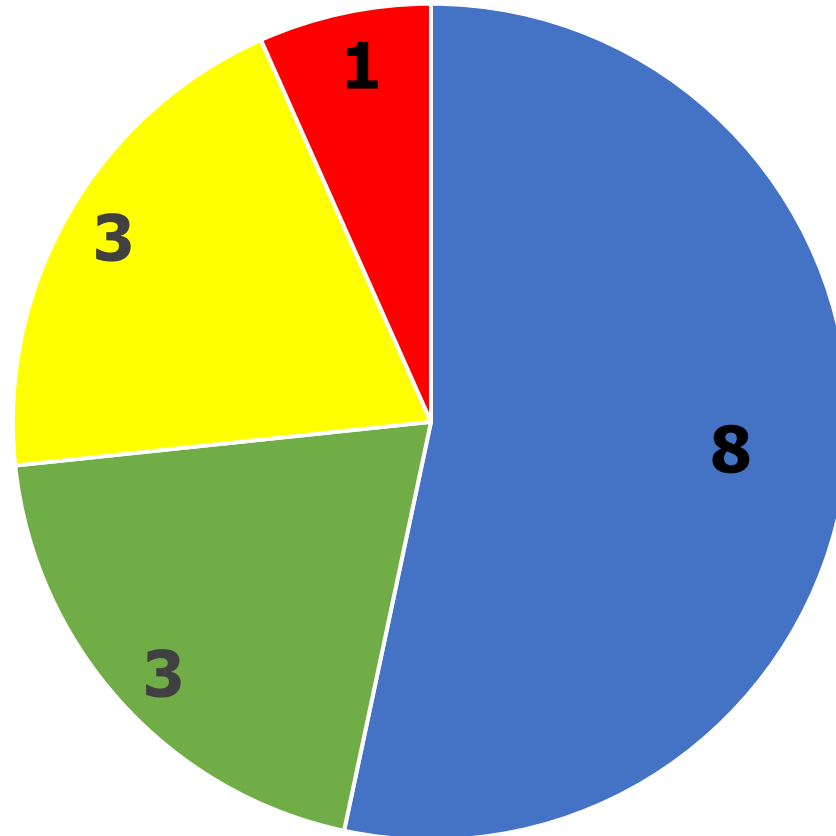
1998-2020

Year	Retirement	Relocation	Death	Health	Training	Inactive	Loss of License	Military	Misc.	Total
1998	23	72	6	1	1	7	1	1	3	115
1999	44	90	3	1	2	10	1	-	4	155
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	59	1	-	-	34	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	48	58	2	4	-	41	1	-	19	173
2016	50	41	2	1	1	51	2	-	6	154
2017	41	40	2	1	1	33	2	-	32	152
2018	51	35	5	1	2	16	1	-	71	182
2019	35	28	3	-	-	10	1	-	41	118
2020	<u>15</u>	<u>13</u>	-	-	-	<u>2</u>	-	-	<u>30</u>	60
Total	818	1270	71	28	23	454	44	3	345	3056
Annual Average	35.6	55.2	3.1	1.2	1.0	19.7	1.9	0.1	15.0	132.9

Source: Iowa Health Professions Tracking Center, Office of Statewide Clinical Education Programs

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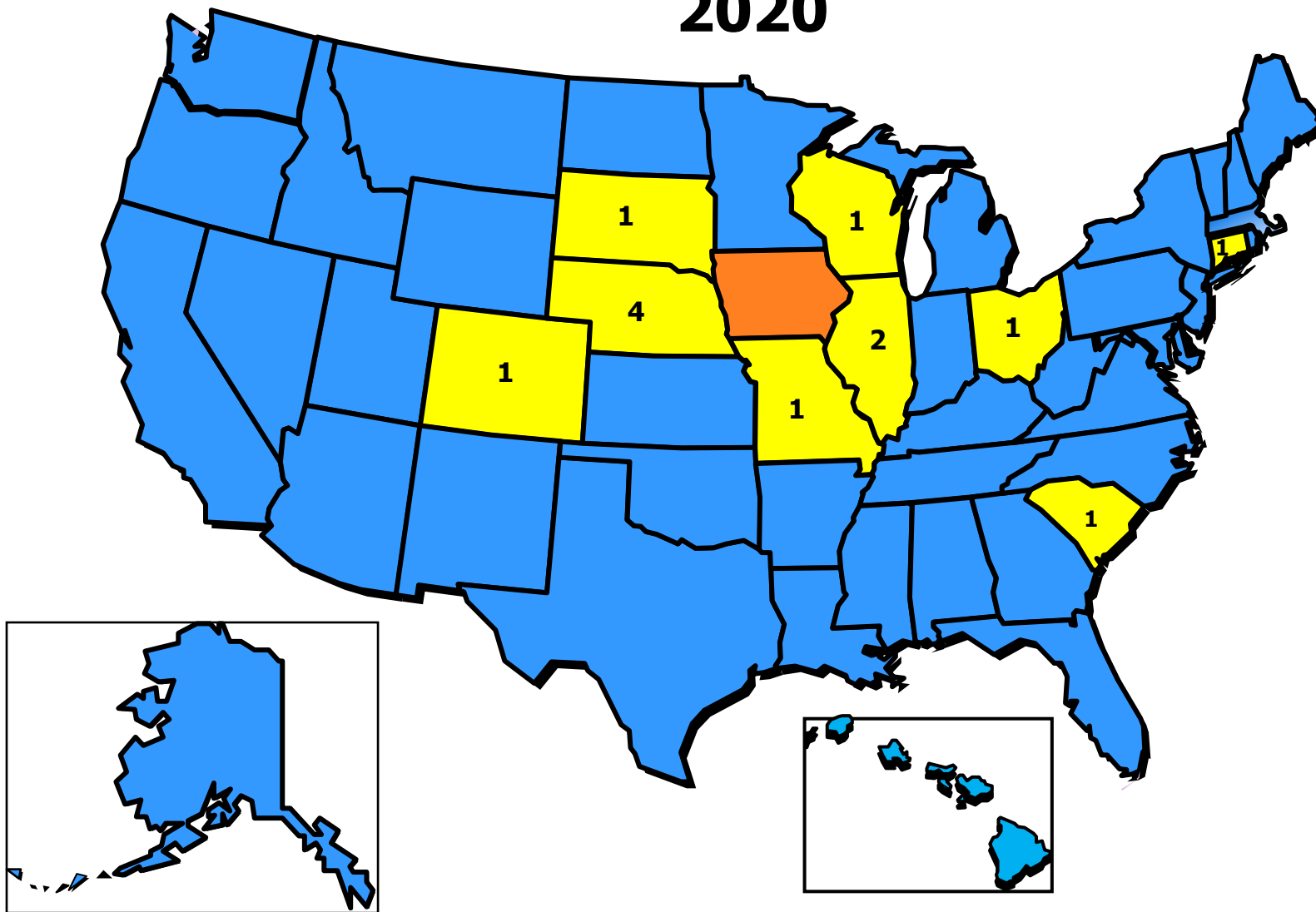
PHARMACISTS RETIRING ACTIVITIES 2020



Total = 15

■ Community ■ Hospital ■ Independent ■ Veterinary

RELOCATION OF IOWA PHARMACISTS IN US (13) 2020



Workforce Comparisons

IOWA HEALTH PROFESSIONS INVENTORY

Composition of Workforce – 2020

Physicians **5,908**

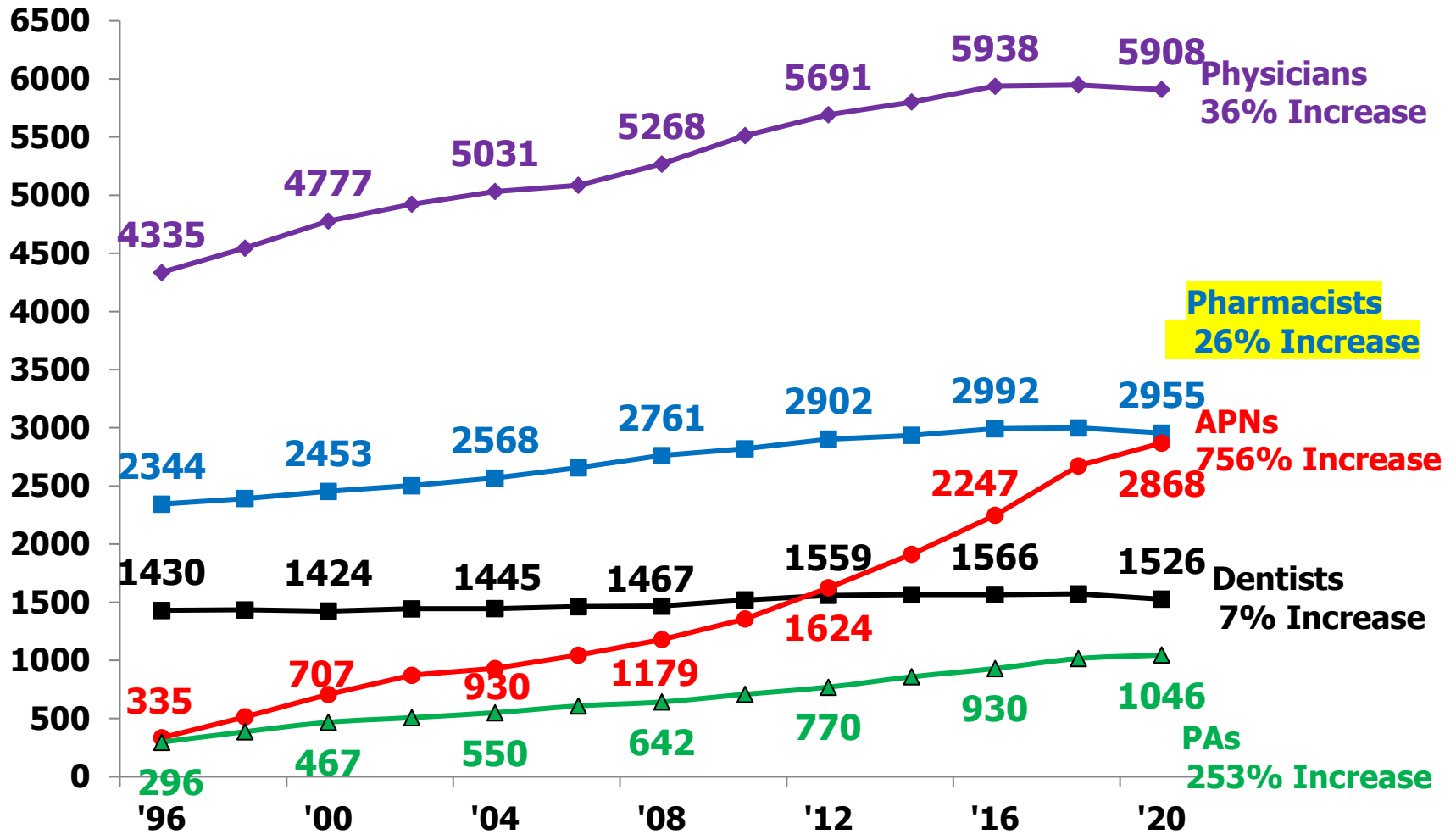
Pharmacists **2,955**

Nurse Practitioners **2,868**

Dentists **1,526**

Physician Assistants **1,046**

IOWA HEALTH PROFESSIONS INVENTORY 1996-2020



IOWA HEALTH PROFESSIONS INVENTORY

Composition of Workforce - 2020

Net Gain/Loss Summary

	<u>Entering</u>	<u>%</u>	<u>Leaving</u>	<u>%</u>	<u>Net</u>	<u>%</u>	<u>Total</u>
Physicians	261	4.4%	296	5.0%	-35	-0.6%	5,908
Pharmacists	41	1.4%	60	2.0%	-19	-0.6%	2,955
Nurse Practitioners	202	7.0%	153	5.3%	49	1.7%	2,868
Dentists	16	1.0%	51	3.3%	-35	-2.3%	1,526
Physician Assistants	58	5.5%	50	4.8%	8	0.8%	1,046

IOWA HEALTH PROFESSIONS INVENTORY

Composition of Workforce - 2020

Gender

	<u>Male</u>	<u>%</u>	<u>Female</u>	<u>%</u>	<u>Total</u>
Physicians	3,929	67%	1,979	33%	5,908
Physician Assistants	290	28%	756	72%	1,046
Dentists	1,012	66%	514	34%	1,526
Pharmacists	1,026	35%	1,929	65%	2,955
APNs	338	12%	2,530	88%	2,868

IOWA HEALTH PROFESSIONS INVENTORY

Composition of Workforce – 2020

Age

	<u>Physicians</u>	<u>Physician Assistants</u>	<u>Dentists</u>	<u>Pharmacists</u>	<u>APNs</u>
<40	1415 24%	528 50%	518 34%	1155 39%	1168 41%
40-49	1621 28%	249 24%	356 23%	797 27%	883 31%
50-59	1477 25%	176 17%	280 18%	566 19%	490 17%
≥ 60	1395 23%	93 9%	372 25%	437 15%	327 11%
Total	5908	1046	1526	2955	2868

IOWA HEALTH PROFESSIONS INVENTORY

Composition of Workforce - 2020

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	103	35%	66	296	54
Pharmacists	15	25%	68	60	52
Dentists	40	78%	66	51	63
Nurse Practitioners	37	24%	65	153	52
Physician Assistants	11	22%	64	50	46

IOWA HEALTH PROFESSIONS SUPPLY*

Rural vs. Urban

2020

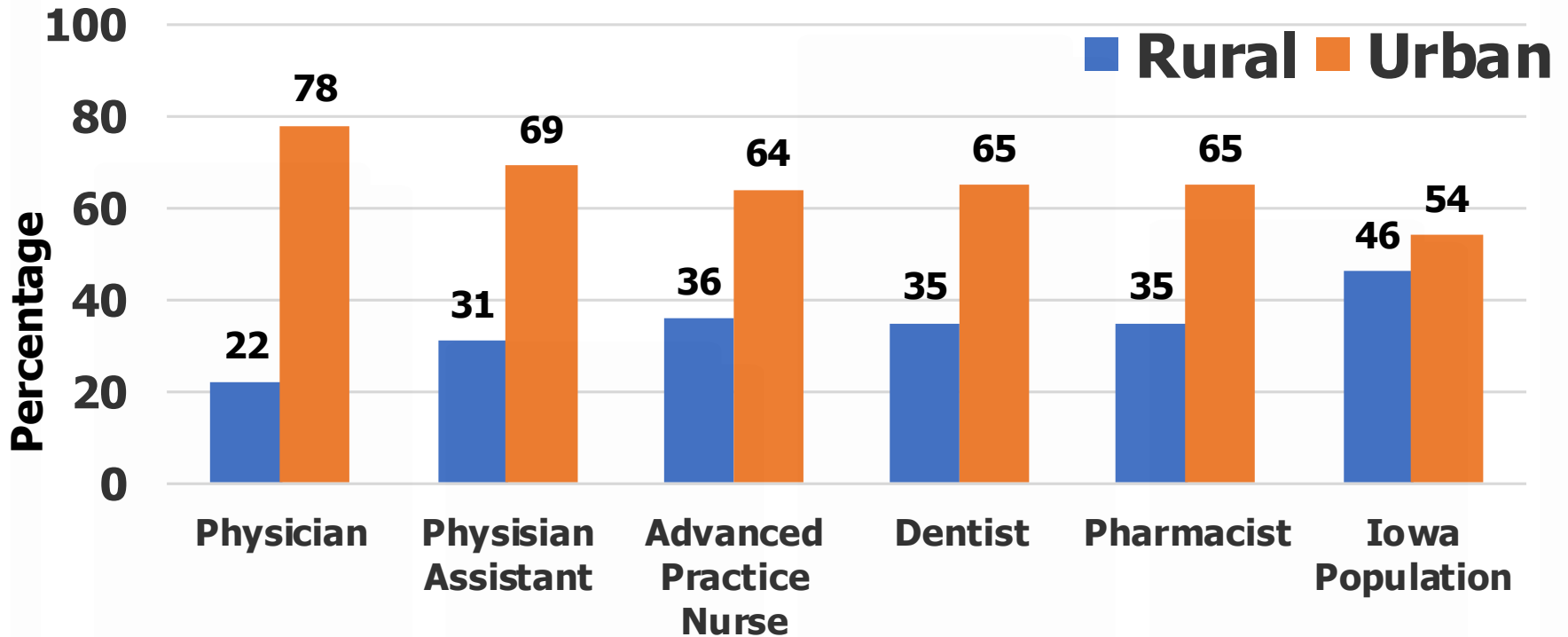
<u>Profession</u>	<u>Rural</u>	<u>%</u>	<u>Urban</u>	<u>%</u>	<u>Total</u>
• Physician	1321	22	4587	78	5908
• Physician Assistant	325	31	721	69	1046
• Advanced Nurse	1040	36	1828	64	2868
• Dentist	529	35	997	65	1526
• Pharmacists	1028	35	1927	65	2955
• IOWA	1,459,510	46	1,730,859	54	3,190,369

* For year ending 12-31-2020, using 2020 census population estimates

IOWA HEALTH PROFESSIONS SUPPLY*

Rural vs. Urban

2020



* For year ending 12-31-2020, using 2020 census population estimates