

Background

- Drug shortages can have significant impact have on health systems and patient care which makes proper reporting, planning, and response essential in order to minimize the negative repercussions.
- Thus far in 2020 98 new shortages have been identified and 166 new shortages were reported in 2019.¹
- The Food and Drug Administration and American Society of Health-System Pharmacists are two groups involved in medication shortage management.
- During the Coronavirus Disease 2019 (COVID-19) pandemic, drug shortages have become an increased concern nationwide. The FDA has responded by creating a COVID-19 Critical Care Drug Monitoring Survey.
- Pharmacists in the state of Illinois expanded medication shortage tracking and communication during COVID-19 via a COVID-19 Medication Shortage Dashboard survey sent out by Illinois Council of Health-System Pharmacists every 2-3 weeks to health systems in Illinois.
- Awareness of Illinois' increased efforts to communicate about medication shortages brings up the question of how other individual states communicate within their state and health systems.

Objective

This study was designed to evaluate the use of medication shortage dashboards before and after the start of the Coronavirus Disease 2019 (COVID-19) pandemic, as well as other forms of medication shortage communication used within U.S. states.

Methods

- The study received approval from the Southern Illinois University Edwardsville Institutional Review Board (study #836).
- 29-question electronic survey developed using Qualtrics online survey software.
- Survey questions inquired about medication shortage dashboard use within the state prior to COVID-19, during COVID-19, and other drug shortage communication methods used by states.
- A combination of multiple choice, select all that apply, and open answer questions were utilized.
- The survey was distributed by email to state Presidents and Executive Affiliates of American Society of Health-System Pharmacists.
- Affiliates received one reminder email and were provided with verbal reminders during weekly State Affiliate calls.
- Descriptive statistics were used to analyze the data.

*States reporting use of a COVID-19 related dashboard: Alabama, Illinois, Minnesota, Nebraska, North Carolina, Texas, Utah

Results

Figure 1: State Survey Responders

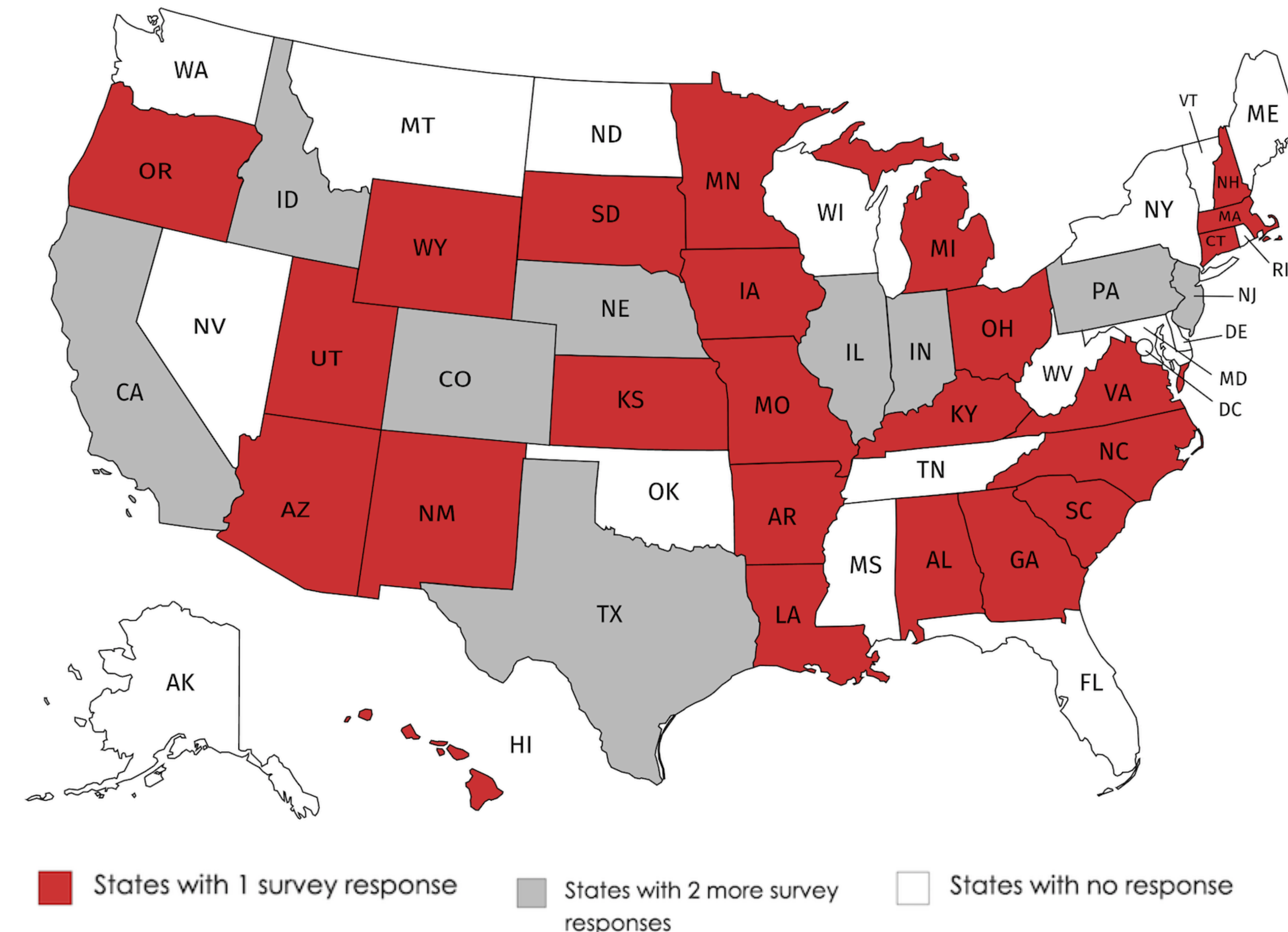


Figure 2: States with a Medication Shortage Dashboard Prior to COVID-19. (N = Number of State Responders)

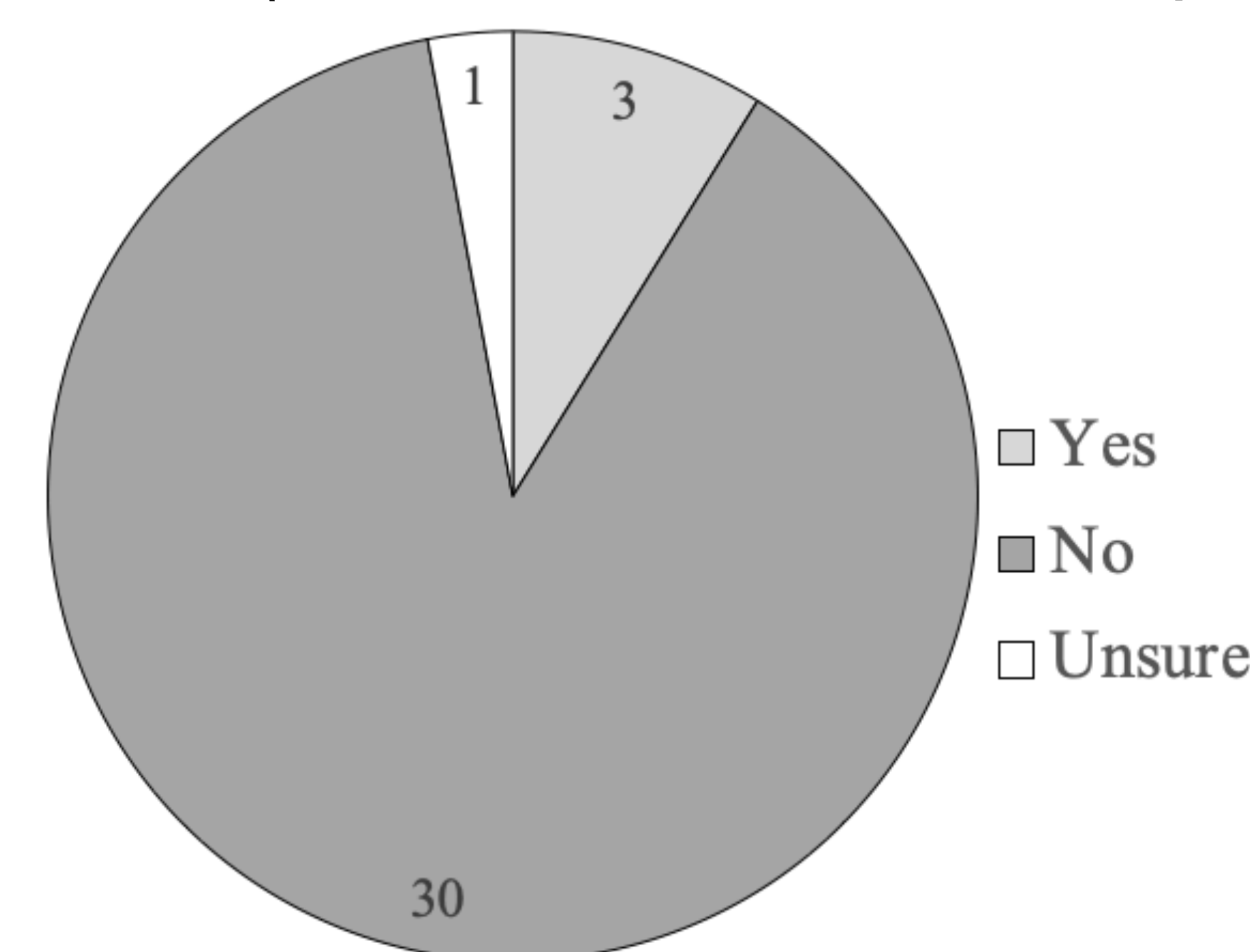
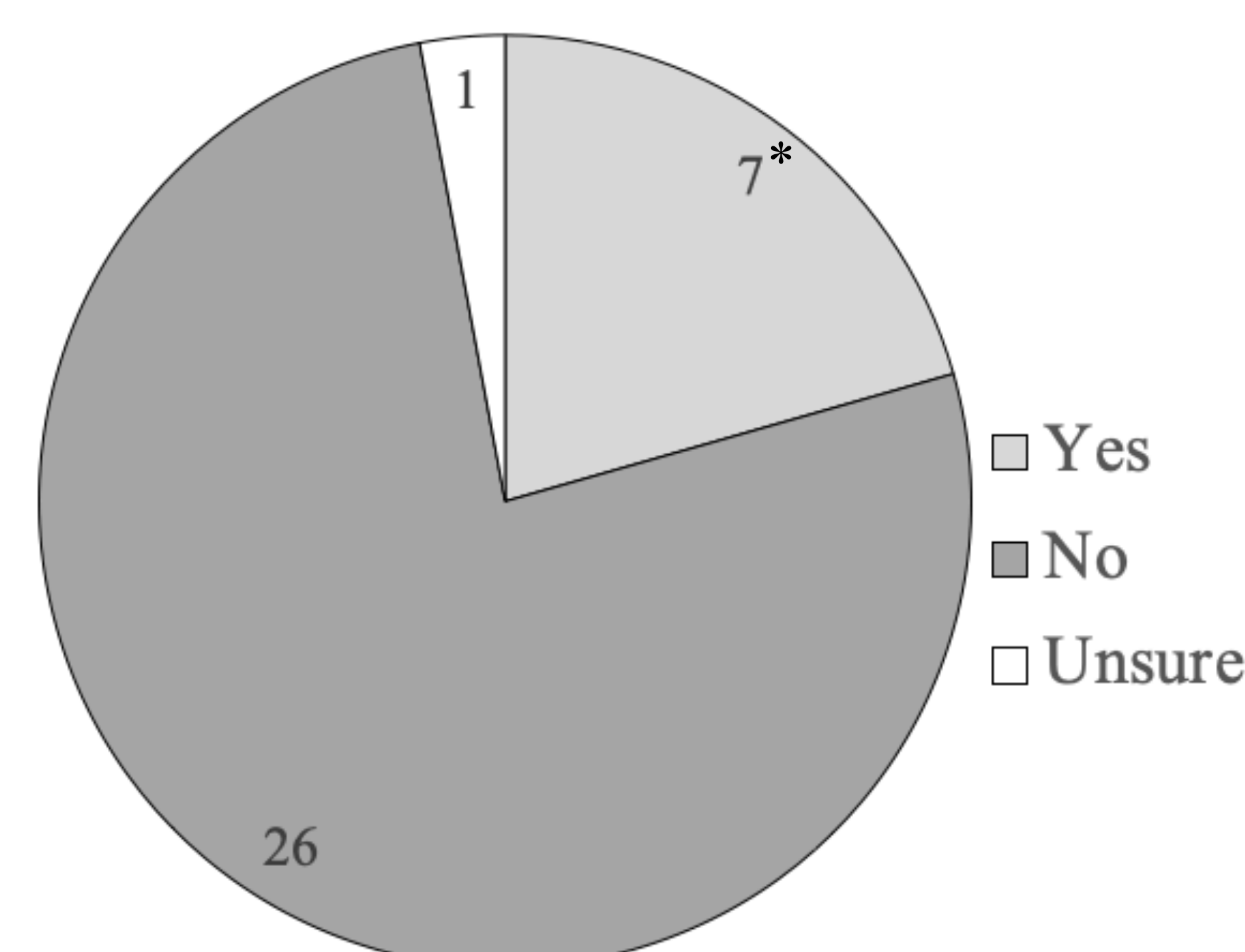


Figure 3: States with a COVID-19 Related Medication Shortage Dashboard. (N = Number of State Responders)



Results

Table 1: Alternative Forms of Medication Shortage Communication

State	Form(s) of Communication Utilized
Arizona	Weekly town hall meetings
California	Virtual meetings Virtual communication with State Affiliate
Connecticut	Conference calls Email
Iowa	Survey sent by state affiliate
Kansas	Board of Pharmacy Newsletter Email
Minnesota	Email Meetings
New England	Hospital Association FDA
New Jersey	Email Meetings
North Carolina	Drug shortage call Pharmacy and Therapeutics committee
Ohio	Actions by Board of Pharmacy Regional collaboration by emergency management agencies
Oregon	Weekly roundtable meeting
Texas	Daily phone calls

Limitations

- Responses were not received from all states.
- Survey questions which were not forced completion had very limited response rates.
- Several instances occurred where state affiliates reported conflicting information regarding utilization or lack of utilization of a medication shortage dashboard within their state. This may have led to decreased internal validity.

Conclusion

Many differing forms of medication shortage communication are utilized by states. Few states currently have medication shortage dashboards in place; however, dashboard utilization rates have increased during the COVID-19 pandemic. As drug shortages continue to occur, particularly during COVID-19, effective communication remains an important part of health care management. Drug shortage communication is an area where continued growth is needed, and pharmacists have the potential to play an important role.

References:

1. Drug shortages statistics. American Society of Health-System Pharmacists. <https://www.ashp.org/Drug-Shortages/Shortage-Resources/Drug-Shortages-Statistics>. Accessed October 23, 2020.