

Evaluating the Policy Impact of Healthy Default Beverages in Children's Meals: Cross-state Comparison

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Webinar presentation to Nutrition and Obesity Policy Research and Evaluation
Network (NOPREN)

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UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources

■ Nutrition Policy Institute



Overview

What data did we collect in this study?

Menu data:

- Beverages shown with kids' meal

Cashier order data:

- Beverages cashiers offered verbally when data collectors ordered kids' meals

Manager interview data:

- Perceptions of kids' meal beverage sales
- Knowledge of policy
- Barriers and facilitators to implementation

When and how were these data collected?

- 1 month prior to and 7-12 months after policy implementation
- In-person at the restaurants

Key takeaways:

1. Beverages offered on menus **did** change pre-post policy.
2. Beverages offered by cashiers largely **did not**.
3. Although **few managers knew about the policy**; most **supported** the policy after it was explained.

Healthy Default Beverages (HDB): Policy Relevance

- Reduction of kids' SSB consumption can mean reductions in diet related disease
- Kids consume 33% of meals away from home
 - Kids' sugar consumption increases by 24-64 calories when they eat at "QSRs"
 - 83% of top 200 chains offer SSBs with bundled kids meals
- Policy opportunity to influence beverage choice without forcing it
 - Typical HDB policies, default beverage = healthy option bundled with kids meal
 - Can choose non-default beverage
- Can create opportunities for:
 - Education of/outreach to restaurant industry leaders & staff
 - Consumer education
 - HDB policy improvement: wording, enforcement, adoption

Policy Approach:

Healthy Default Beverages in Children's Meals



State of California (SB-1192)

- water (plain, sparkling, or flavored, no added sweeteners)
- unflavored milk and/or non-dairy alternative
- all restaurants



City of Wilmington, DE (Ord. No. 18-046) and State of Delaware (HB 79):

- water,
- flavored or unflavored milk
- 100% juice
- all restaurants

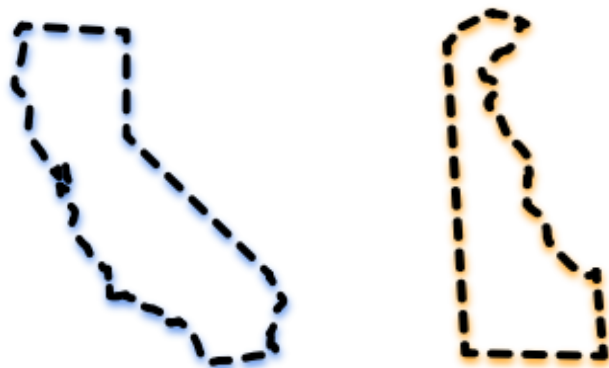
Both policies:

- apply only to **bundled** kids' meals
- other beverages can be sold upon customer request.

Study overview and research questions

University of Delaware (UD) and Nutrition Policy Institute (NPI, part of the University of California Division of Agriculture and Natural Resources) partnered to collect data pre-post HDB policy implementation.

1. What is the change in adherence with the beverage policy from one month *before* to 9-12 months *after* implementation?
2. What are the challenges to implementation and potential solutions for improving policy adherence?



Data Collection Approaches

Policy language: “offer” vs. “listed”

*Baseline
(December 2018)*

*Follow-up (Fall 2019)
with RWJF support*

*Baseline Jan/Feb
2020 (n=52)*

CALIFORNIA
(n=111)



Observation of menu board

Observation of menu board

Interview with restaurant manager

Order placed with cashier & drive-through (if available)

Order placed with cashier & drive-through (if available)

WILMINGTON (n=16)



Observation of menu board*

Observation of menu board*

Interview with restaurant manager

Order placed with cashier & drive-through (if available)

Observation of menu board*

Order placed with cashier & drive-through (if available)

Interview with restaurant manager

* For sit-down restaurants, printed menus and/or printed kids menus were observed

Data Collection Methods



FINDINGS:

Pre-post policy implementation data collection in California and Wilmington



Pre-Post Results: Sampled restaurants

CALIFORNIA
(n=111)



- 111 restaurants
- Random, stratified sample in select neighborhoods in 11 counties
- 100% **low-income communities** (SNAP-Ed eligible census tracts)
- 100% **quick-service** (QSR)
- 100 (90%) **chain, 14 brands**
- 70 (63%) **voluntary HDB standards at baseline**

WILMINGTON (n=16)

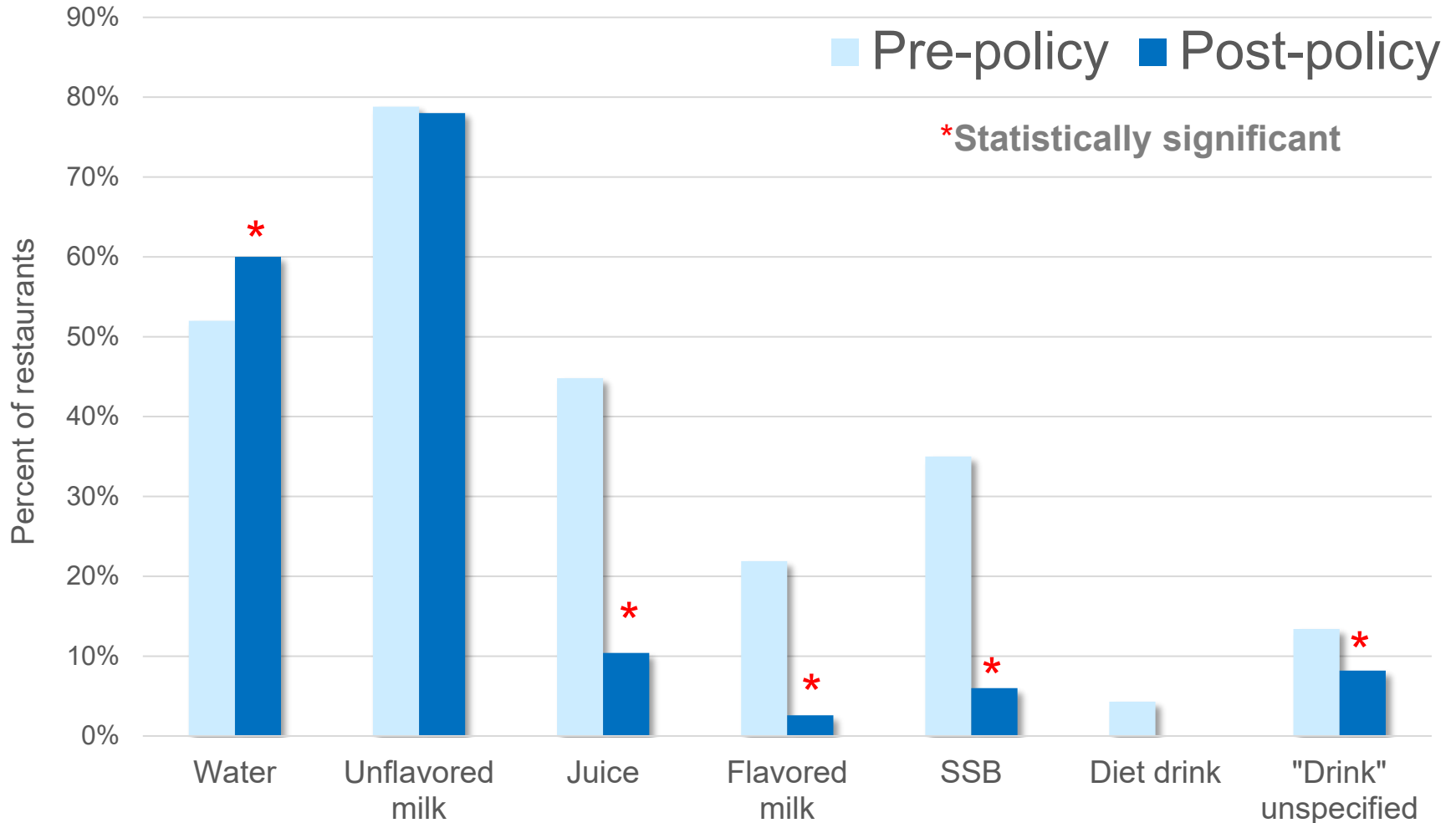


- Census sample of all 16 restaurants that offered eligible kids' meals
- 9 (56%) **quick-service**
- 7 (44%) **sit-down**
- 9 (56%) **chain, 7 brands**
- 4 (25%) **voluntary HDB standards at baseline**

CALIFORNIA
(n=111)



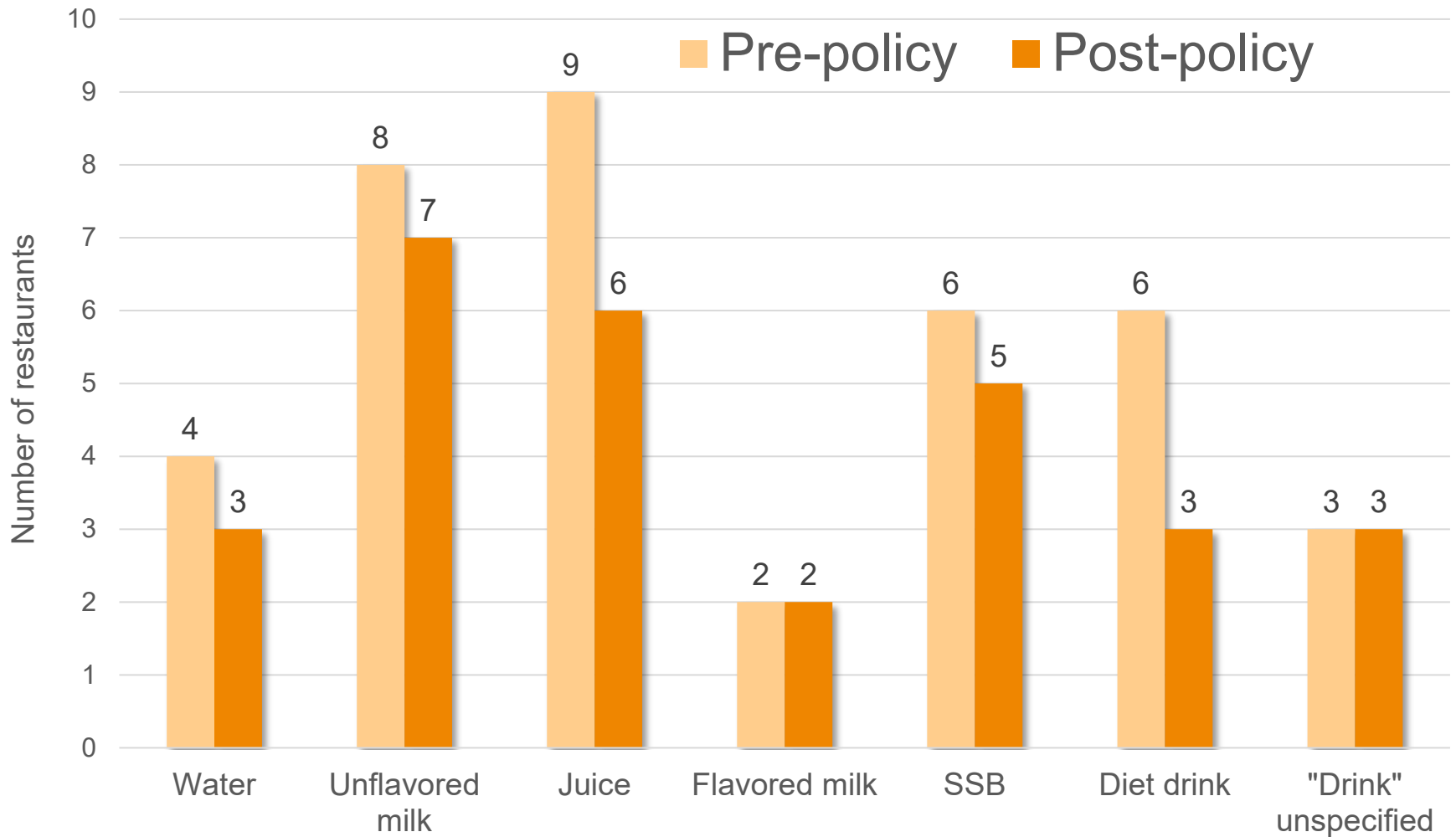
Pre-Post Results – Beverages on Menus



Generalized linear mixed model used to compare pre-post change, clustered by chain and restaurant; adjusted for presence of drive-through

WILMINGTON
(n=16)

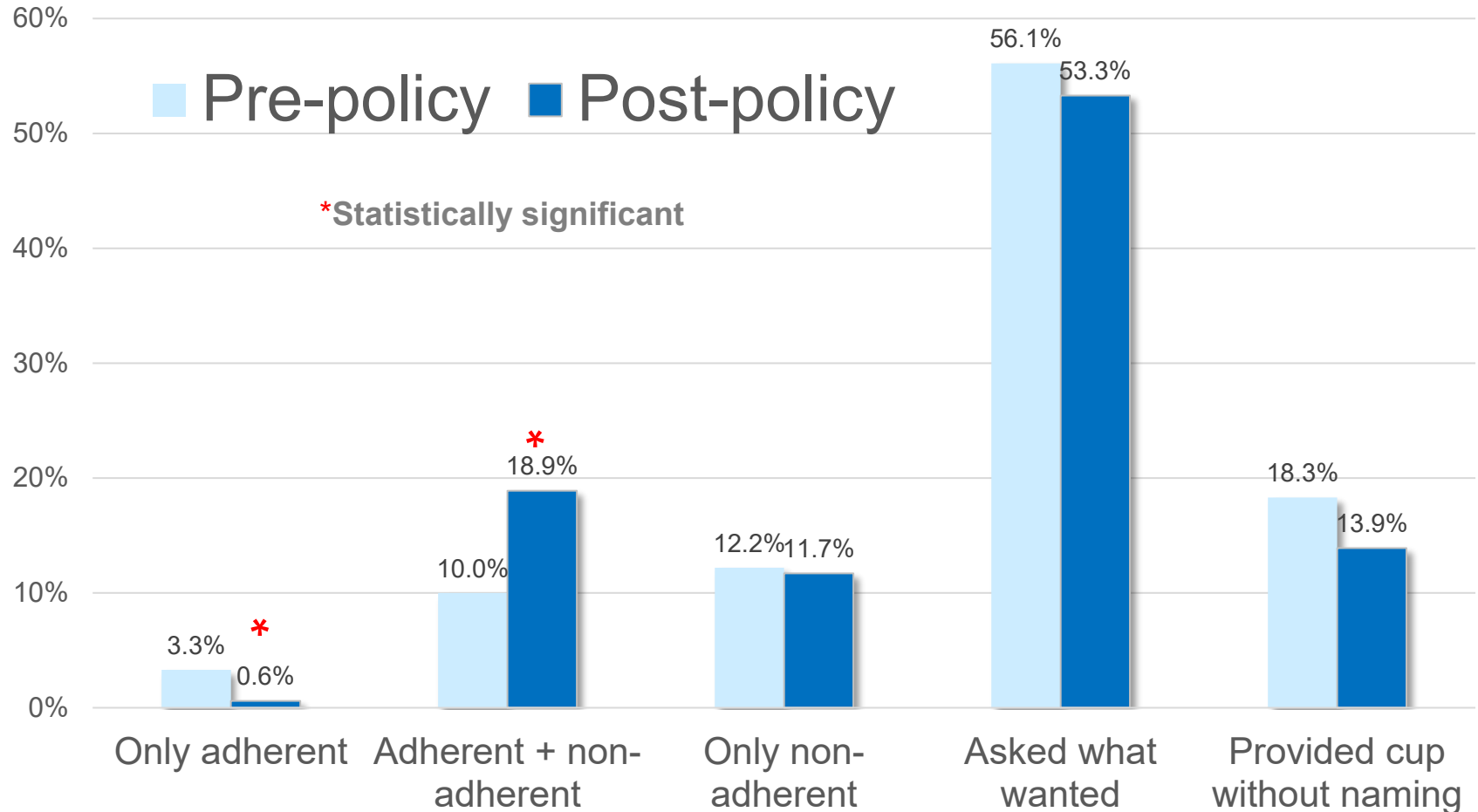
Pre-Post Results - Beverages on Menu



CALIFORNIA
(n=111)

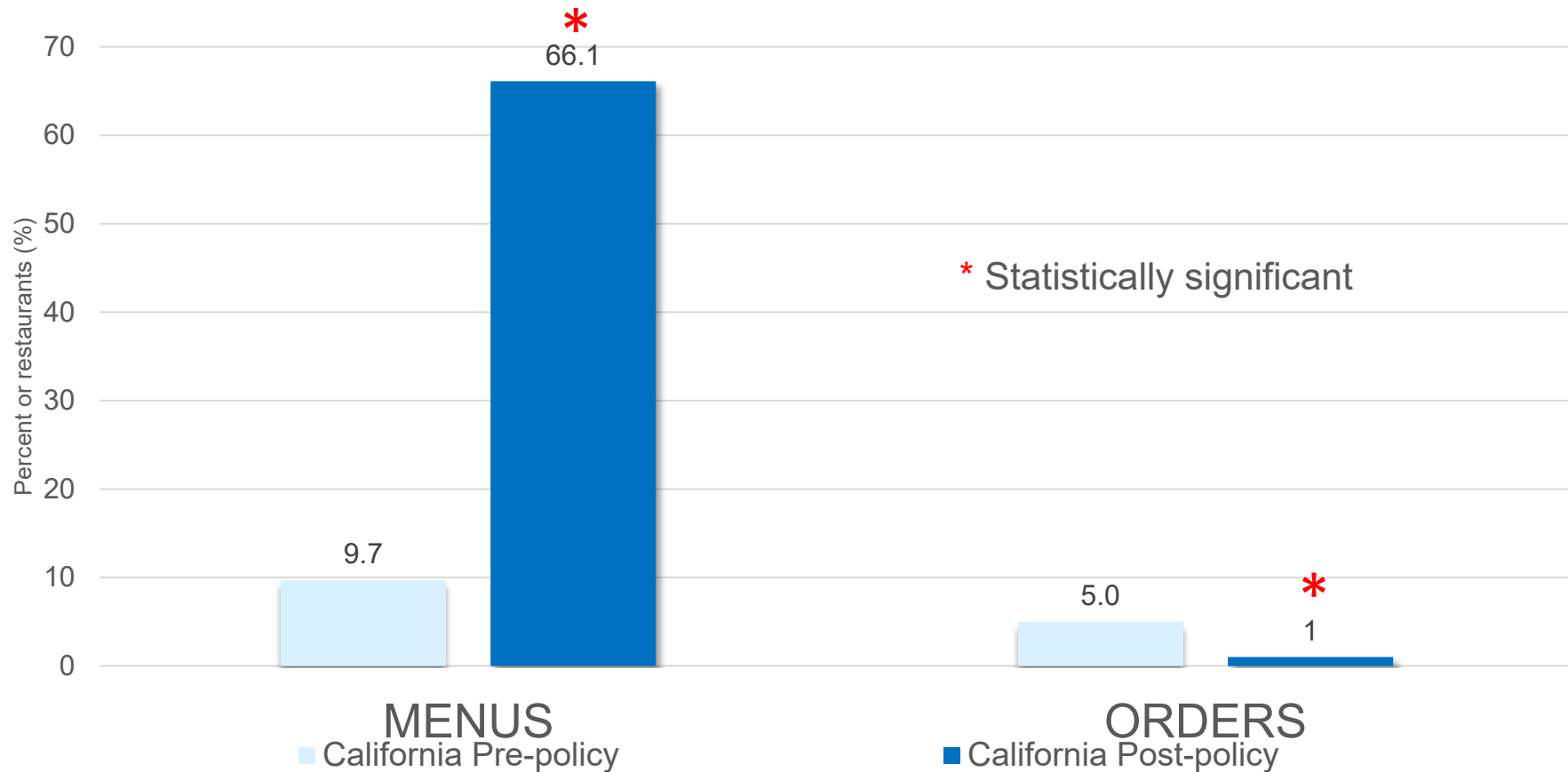


Pre-Post Results – Beverages offered during ordering



Generalized linear mixed model used to compare pre-post change, clustered by chain and restaurant; adjusted for presence of drive-through

Pre-Post Results – Policy Adherence of Menus and Orders California:



Wilmington:

Menus: 25% adherent at pre, 25% adherent at post (no change)

Orders: 7.1% adherent at post (pre-policy, orders not observed)

Manager Interview Data

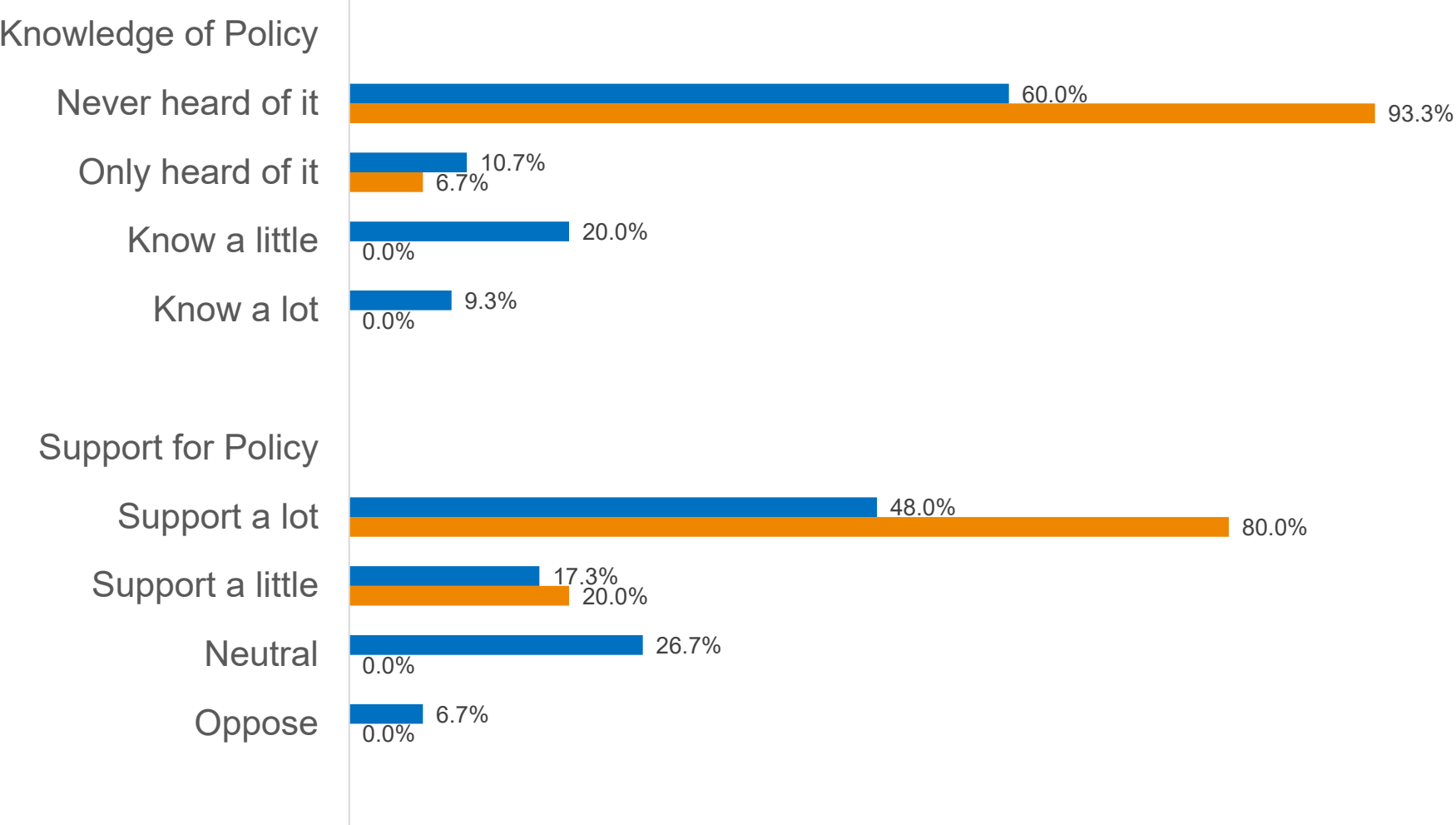
Majority collected in-person; 2 CA interviews done by phone

Questions covered:

- 1. Estimated sales (%) of kids' meal beverages**
- 2. Policy knowledge (self-reported)**
- 3. Perceptions of policy**
- 4. Any complaints** about kids' meal beverages
- 5. Perceived barriers and facilitators** to implementation

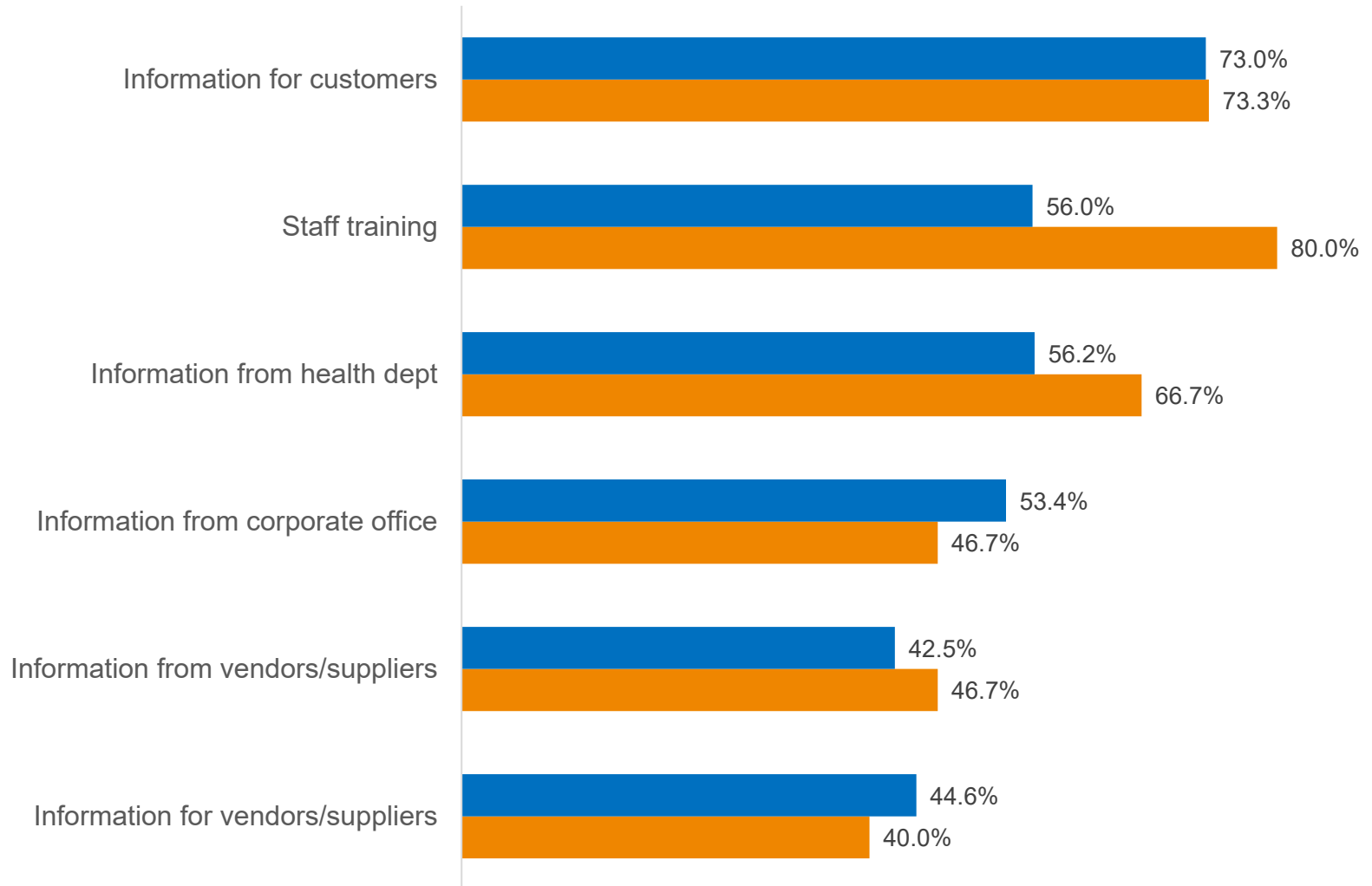
Post Results – Manager Knowledge & Support of Policy

■ California ■ Wilmington



Post Results – Manager Needs for Policy Implementation

■ California ■ Wilmington



Pre-post results summary: CA and Wilmington

1. Menu boards changed, but beverages offered by cashier/server largely did not
2. Few managers knew about the policy
 - In California, only 29% of managers reported knowing '*a little or a lot*'
 - In Wilmington, **none** of the managers reporting knowing 'a little or a lot'
3. Most managers were interested in a wide variety of support from the restaurant community, licensing/enforcement and public health
4. Most managers (65%-100%) supported the policy and did not report customer complaints or changes in kids' meal sales (data not shown)

Policy Implications

- To support full implementation, the following may be needed:
 - Clear policy language that applies to menus/boards and the ordering process
 - Education and training for restaurant managers and staff
 - Enforcement mechanisms based on ambiguous language (e.g., 'offer'): Louisville, KY Children's Meal Ordinance FAQs (<https://louisvilleky.gov/government/mayors-healthy-hometown-movement/children%E2%80%99s-meal-ordinance>)
 - **Can I verbally relay to patrons the food options or do I need to change all of my menus.**
 - You can choose to verbally relay to patrons their options in lieu of changing your menu.
- Sit-down restaurants have unique challenges
 - Does water service before ordering count as adherent?





Next Steps: California's HDB Policy

- Evaluate impact of local support for the state-wide policy
 - Create and implement local intervention (with Calif. Department of Public Health and local health departments)
 - Restaurant staff
 - Customers
 - Developed and piloted drive-through customer survey protocol (in partnership with UC Merced)
 - Pre/post test impact on menu boards, ordering and customer purchases
- Evaluate change in customer purchases pre/post legislation
 - Conduct post-legislation customer surveys



DELAWARE
STATEWIDE
(n=50)

DE Has Also Assessed 50 Baseline Restaurants Statewide, Menus and Manager Interviews

- Methods
 - Called, screened all DE restaurants (not in Wilmington) re: kids' meals
 - N=1,375; n=207 offered bundled kids meals; Final n=52, 2 refusals
 - Testing, refinement of survey tool coordinated with CA
 - 63%: Chain, both QSR (n=20) & full-service (n=30)
- Results
 - Restaurants
 - 71% (all restaurants); 79% (chains): Sold policy-adherent drinks
 - Managers
 - 80%: Worked at restaurant \geq 1 year
 - 3%: Aware of policy while 75% supported HDB policy “a lot”
 - 91%: Cited need for staff training & promotion to support policy compliance
- Moving Forward
 - Inform restaurant managers in chains about HDB policies: most impact
 - Educational materials and programs: restaurant staff and customers
 - Examine online and meal delivery systems during COVID-10



Next steps: Delaware

- Follow-up data collection, statewide
 - Post-policy, enactment: July 2020 or upon rules promulgation
 - Funding pending
- Continue development of national research strategies with CA, HI partners

Future Research

- COVID-19 effects on HDB policies
 - Online ordering, third-party delivery
 - NPI work on drive-through ordering
- Kiosks, online ordering at QSRs
- Unbundling meals
- Real-time sales data needed
- Differences with sit-downs
- Policy enforcement and monitoring



Expanded Policy Implementation:

- 17 cities, counties, states have passed healthy default beverage policies to date
- Hawaii passed a statewide law in 2019 that went into effect 1/1/2020. The law includes:
 - Water (can be sparkling or flavored);
 - Unflavored nonfat or 1% dairy milk or non-dairy milk alternative, and;
 - 100% juice up to 8 oz.
- **With expansion of policies, additional opportunity to collect data on implementation and identify successful support mechanisms**

Dissemination products

Manuscripts

1. Pre-post CA and Wilmington results
2. Delaware statewide baseline, interview data

Policy brief focused on CA, Wilmington

- What is the issue?
- What HDB policies exist nationwide and how do they compare to each other?
- Policymaker perspectives on CA and Wilmington policies
- Methodology
- Key findings
- Policy implications and recommendations
- Future research needs

Presentation at APHA 2020

- Pre-post CA and Wilmington results

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