

Program News and Updates

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Presentation to the Scientific Guidance Panel Meeting
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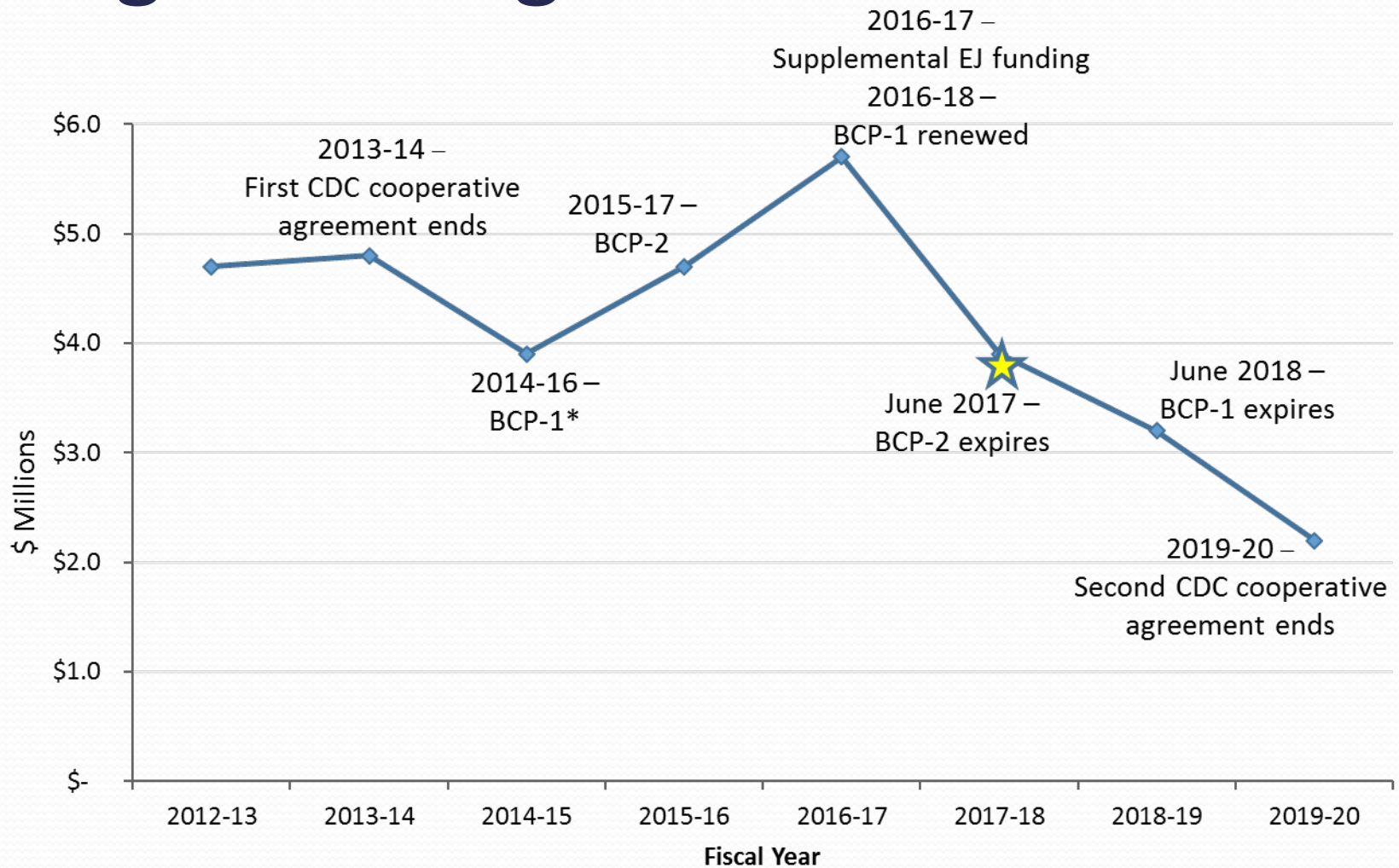
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Program Budget



*Program budget was supplemented through the Budget Change Proposal (BCP) process as a temporary measure following the 2014 reduction in CDC funding.

Project Updates

| | Sample Collection | Lab Analysis | Results Return |
|--------|-------------------|----------------------------|---|
| BEST | Complete | Arsenic retesting complete | • Complete |
| | | Perchlorate complete | • August 2017 |
| FREES | In progress | In progress | <ul style="list-style-type: none"> • Initial (pre-foam or furniture replacement) results returned • Partial 6-month results will be returned in August 2017 |
| ACE I | Complete | Complete | <ul style="list-style-type: none"> • August 2017 • Community meeting scheduled for September |
| ACE II | Complete | In progress | • January 2018 |

Biomonitoring Exposures Study (BEST)

- Original analytical panels have been completed
- Perchlorate results are scheduled to be returned to participants in August 2017
- 218 urine samples were analyzed for arsenic
 - 57 of the 218 were found to have arsenic levels $\geq 20 \mu\text{g/L}$
 - 30 were found to have inorganic arsenic levels $\geq 20 \mu\text{g/L}$
 - Of the 15 retested, 5 were again found to have inorganic arsenic levels $\geq 20 \mu\text{g/L}$
- 56 remaining urine samples will be tested for arsenic

Foam Replacement Environmental Exposure Study (FREES)

Total # Participants = 28

| | Initial sample | 6-month sample | 12-month sample | 18-month sample |
|-------------------|----------------|----------------|-----------------|-----------------|
| Total | 28 | 26* | 26 | 26 |
| Samples collected | 28 | 26 | 15 | 5 |
| Results returned | 28 | 15** | 0 | 0 |

*Two participants withdrew from the study after initial sample collection.

** Packets are scheduled for return in August 2017.

Asian/Pacific Islander Community Exposures (ACE) Project

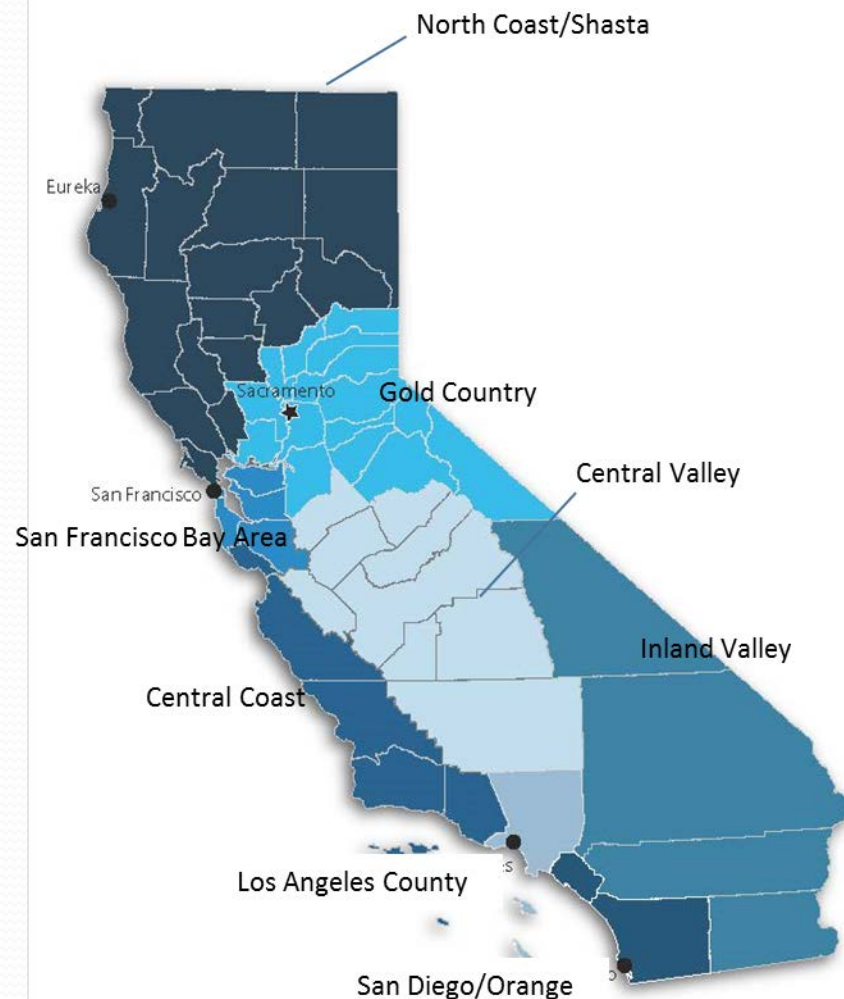
- Currently conducting notification of participants with elevated metals levels
 - One participant was found to have elevated blood mercury
 - Of 100 participants, 54 had total urinary arsenic levels $\geq 20 \mu\text{g/L}$
 - 26 participants had inorganic arsenic levels $\geq 20 \mu\text{g/L}$
- All results will be returned to participants in August 2017
- Community meeting, open to the public, will be held on September 9, 2017, in San Francisco

Environmental Justice Activities

- Asian/Pacific Islander Community Exposures (ACE) II
- East Bay Diesel Exposure Project
- Community outreach and engagement
 - Survey
 - Community meetings/webinars
 - Newsletter

The California Regional Exposure (CARE) Study

- Eight regions, based on geography and population
- Conduct sampling in approximately one region/year, with 300-500 participants per region
- Biomonitoring for metals and per- and polyfluoroalkyl substances (PFASs) and collection of exposure data
- Potential to include additional chemical panels, multiple samples per participant, intervention studies, etc. for a subset of participants



CARE Study: Developing our message

- Cross-department discussions to set objectives
- Consulted with communications experts to hone that message
- Focus groups conducted in English and Spanish
 - Motivational message
 - Images
 - Study name





CARE
study

LA



California Regional Exposure Study

Are there chemicals in your
body that could harm your
health? Learn more by joining
the CARE Study.

¿Hay sustancias químicas en su cuerpo que
podrían dañar su salud? Obtenga más
información al unirse al estudio CARE.

身体有化学物质会伤害你的健康吗？通过加入
CARE研究了解更多信息。

Mayroon bang mga kemikal sa iyong katawan na
maaaring makapinsala sa iyong kalusugan?
Matuto nang higit pa sa pamamagitan ng pagsali
sa Pag-aaral ng CARE.

건강을 해칠 수 있는 화학 물질이 몸 속에
있습니까? CARE Study에 가입하면 더 많은
것을 배울 수 있습니다.

Ձեր մարմնում քիմիկատներ կան, որոնք
կարող են վնասել ձեր առողջությանը:
Իմացեք ավելին, միանալով CARE Study- ին:
Có những chất hóa học trong cơ thể bạn có thể
gây hại cho sức khỏe của bạn? Tìm hiểu thêm
bằng cách tham gia vào Nghiên cứu CARE.

هه ډناوت یم مک ډراد ډو چو ییایمیش داوم امش ندب رد ای
هه لاطم هه نیتسو یپ اب؟ ډناسرب بیس امش یتمالس
دین ادب رتش ی CARE

あなたの体には健康に害を及ぼす可能性のある
化学物質がありますか？ CAREスタディーに参加
してもっと学びましょう。

Существуют ли в вашем организме химические
вещества, которые могут нанести вред вашему
здоровью? Узнайте больше, присоединившись к
CARE Study.



BIOMONITORING
CALIFORNIA

California Regional Exposure (CARE) Study

Study of metals and other environmental chemicals in adults across the state, conducted one region at a time

The goal of the California Regional Exposure (CARE) Study is to measure and compare environmental chemicals in people across the state. This information will support efforts to reduce chemical exposure in Californians and improve public health.

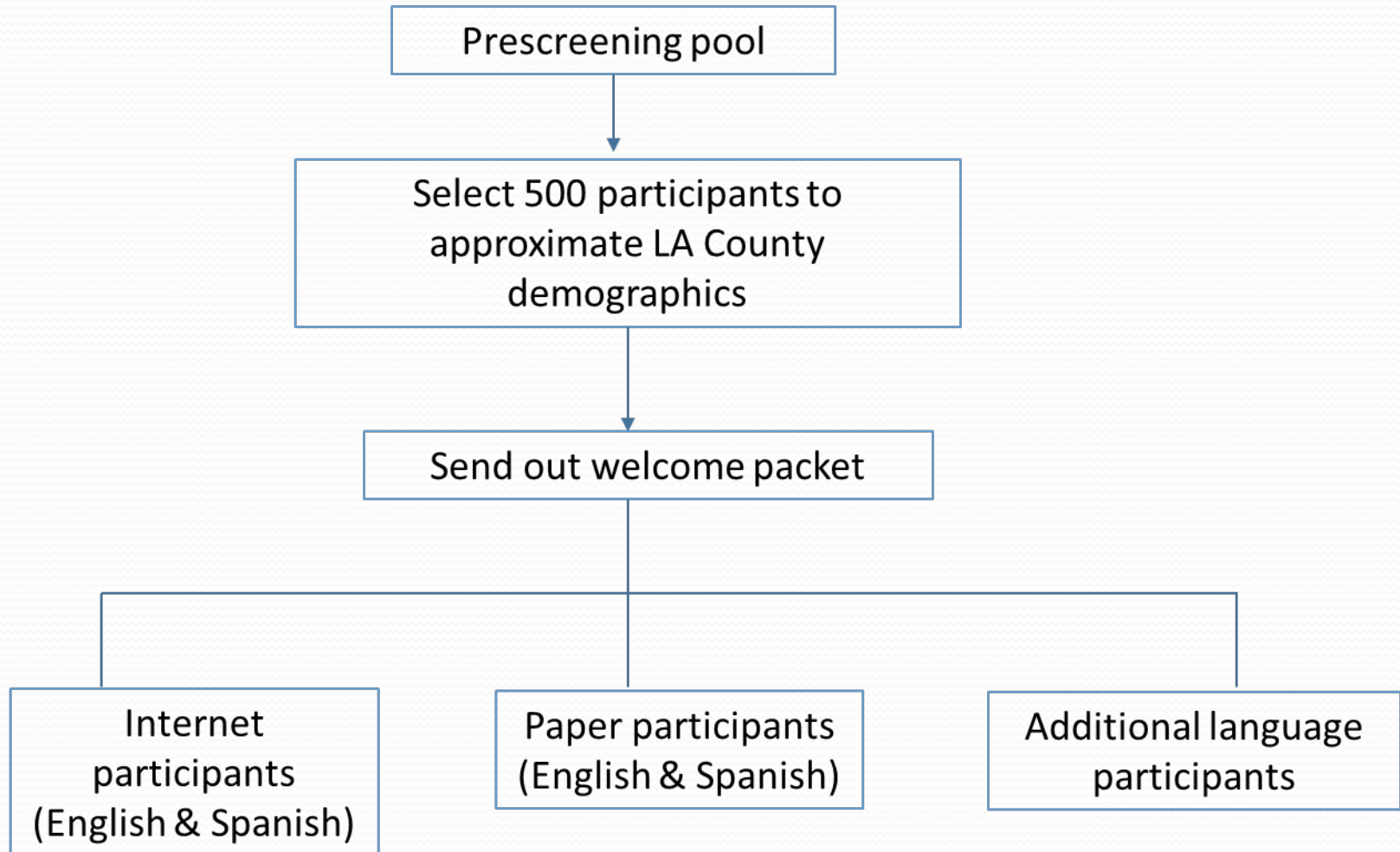


The study will measure levels of selected metals in urine and/or blood, and levels of perfluoroalkyl and polyfluoroalkyl substances (PFASs) in [serum](#). [Participants](#) will be recruited from eight regions of the state, with one to two regions covered each year depending on resources.

In each region, we will:

- › Enroll between 300-500 adults, representing different racial and ethnic backgrounds, income levels, and communities within the study area
- › Collect information from [participants](#) to identify potential exposure sources
- › Collect blood and urine samples
- › Measure levels of selected metals and perfluoroalkyl and polyfluoroalkyl substances
- › Return [individual results](#) to [participants](#)
- › Hold community meetings to describe overall study findings

Participant Selection



Welcome to the CARE Study

- Packet includes informed consent, exposure survey, and appointment scheduling calendar



Internet Participants

Log in to website and complete steps electronically



Paper Participants

Receive and return materials through the mail



Additional Language Participants

Complete study steps with an interpreter

Data Tracking and Monitoring

- Salesforce platform will be used by staff to collect and monitor data
- Internet participants will log in to system to complete study steps
- Automated system within Salesforce to send out reminders of incomplete steps
- For non-Internet participants, the system will create task notifications for staff

Field set-up

- Phlebotomist/interviewer staff will be in Los Angeles for 12-15 weeks
- 3-4 events/week and some home visits
- Samples will be managed and stored in field office and periodically shipped back to the lab

CARE Study: Proposed Timeline

| | Region 1 | Region 2 |
|-----------------|---|--|
| Jul 2017 | <ul style="list-style-type: none">• Submit IRB protocol | |
| Aug to Dec 2017 | <ul style="list-style-type: none">• Outreach to community partners• Refine materials and tools | |
| Jan 2018 | <ul style="list-style-type: none">• Start recruitment | <ul style="list-style-type: none">• Begin outreach to community partners |
| Feb to Apr 2018 | <ul style="list-style-type: none">• Participant recruitment, enrollment, and sample collection | <ul style="list-style-type: none">• Continue community partner outreach |
| May to Dec 2018 | <ul style="list-style-type: none">• Laboratory analyses | <ul style="list-style-type: none">• Refine materials and tools• Submit IRB protocol |
| Jan 2019 | <ul style="list-style-type: none">• Results return | <ul style="list-style-type: none">• Start recruitment |



Questions and Discussion