

<p style="text-align: center;">Meeting Summary May 12, 2025 CO SCOPE Community Advisory Panel</p>
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The thirteenth meeting of the Community Advisory Panel (CAP) of the Colorado Study on Community Outcomes from PFAS Exposure (CO SCOPE) met online via Zoom on the eve of May 12, 2025.

The meeting covered the following items:

- Why we are doing this study
- National work
- Colorado specific work
- Next Steps

The PowerPoints for the meeting can be found [here](#):

Appendix A of this document includes the Study Team's contact information. Appendix B is an attendance list for the meeting. Appendix C summarizes key recommendations made at this meeting and all prior CAP meetings and the Study Team's response.

<p style="text-align: center;">Brief Summary of PowerPoints</p>
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- The overall purpose of the MSS Study is to better understand health related outcomes of per and polyfluoroalkyl substances (PFAS).
- By September 2023, bio-samples and questionnaires were collected from 6,536 participants around the country at eight different sites. Over 1,000 of the participants were from Colorado.
- Teams across the country are analyzing this information to determine potential PFAS-related impacts on diabetes, high cholesterol, heart disease, hypertension, metabolic syndrome, neurobehavioral outcomes in kids, obesity, pregnancy complications, and thyroid disease.
- The Study Team in Colorado is looking at 3 additional topics:
 - Does PFAS affect COVID antibody levels in blood?
 - Does PFAS affect biomarkers of testicular cancer risk?
 - Is PFAS in indoor air and dust?
- Some early results are available on the indoor air and dust work, where 17 houses were studied. A brief summary of the findings include:

Blood

- PFHxS, PFOA, and PFOS were detected in blood samples.
- Participants who had FASAs detected in their blood tended to be on well water

Water

- FASAs were seen in well water households
- Municipal water FASA concentrations were mostly non detect and 2 were barely above detection
- Municipal water meets EPA's health-based standards

House Dust

- Median PFAS levels were somewhat higher in private well water homes than in homes on municipal water
- Multiple sources of PFAS in consumer products (e.g., carpet) complicate interpretation of these findings

Indoor Air

- Most PFAS were not detectable in indoor air.
- The CO SCOPE Team plans to hold online community meetings in 2026 to summarize published results to date on PFAS and health outcomes. They will also provide written summaries as well once substantive findings are published.
- The CO SCOPE team will provide a written update to the CAP in the fall of 2025. Public online meetings will occur in early 2026.

<h3>Question and Answer/Discussion</h3>

In addition to briefing the PowerPoints above, the following items were raised during the question-and-answer periods:

- A community member noted that a new book summarizing the history of PFAS in the Fountain area has been published. *The title is Poisoning the Well: How Forever Chemicals Contaminated America.*
- In addition to looking at potential PFAS impacts on testicular cancer, a CAP member asked whether there are studies focused on the impact of women's health. Dr. Starling responded yes. The PA team is specifically looking at breast cancer impacts. There are other issues related to pregnancy and hormones that all the teams will track.
- The CAP discussed whether the study will have sufficient statistical power given some of the small sample sizes. It was noted that each of the sites are so different that this can be a problem trying to combine all of the data. However, the Colorado and Pennsylvania sites are in strong positions given the large number of participants from both sites.

- The CAP discussed the number of consumer products that have PFAS in them. CDPHE is apparently getting a consumer products guide ready to share with the public, which should be available on their website soon. Dr. Adgate noted that the CO SCOPE team also has a short Resource Guide on consumer information, which can be found [here](#).
- A CAP member asked much study had been done on the relationship of PFAS and genetics. The CO SCOPE team responded that there are likely minor genetic differences between people, particularly in how well their kidneys work, that may influence how long PFAS stay in the body. For example, some people could reduce their levels of PFAS a little more efficiently than others when urinating. However, the differences are small, and not very actionable since people have no control over their genetic make-up.
- Dr. Higgins of School of Mines noted that there are a number of treatment demonstration projects that are happening at Peterson Space Force Base. As there are efforts to showcase these projects and get the public involved, they may be reaching out to this team for input.

APPENDIX A

List of Key Staff Contacts

Colorado School of Public Health Contacts

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APPENDIX B

Attendance at the February 22, 2024 CAP Meeting

Name (first)	Name (last)	Attendance (Zoom)	Role
Robin and Carrie	Bell		Community Member
Brandon	Bernard		Community Member
Pat	Edelman	X	Community Member
Tamara	Estes		Community Member
James	Flowers		Community Member
Suzanne	Foster	X	Community Member
Rick	Giles	x	Community Member
Roy	Heald	X	Community Member
Greg	Miller	X	Community Member
Kat	McGarvy		Community Member
Sarah	McKinney		Community Member
Taylor	Murphy		Community Member
Carola	Rafferty		Community Member

Charlize	Rafferty	X	Community Member
Liz	Rosenbaum	X	Community Member
Chris	Poulet		Technical Team (ATSDR)
Karen	Simpson		Technical Team (EPA)
John	Adgate	x	Study Team (Colorado School of Public Health)
Kelsey	Schreiber		Study Team (CDPHE)
Kristi	Celico	X	Facilitator
Chris	Higgins	X	Study Team (Colorado School of Mines)
Mallory	O'Brien	X	Study Team (CDPHE)
Kristy	Richardson		Study Team (CDPHE)
Anne	Starling	X	Study Team (Colorado School of Public Health)
Amber	Vaughn	X	Study Team (Colorado School of Public Health)
Brent	Windebank	X	Study Team (Colorado School of Public Health)

APPENDIX C

Facilitator's Tracking Document

Date	Action Requested or Action Committed	Response
02-22-24	<p>CAP Recommendations:</p> <ol style="list-style-type: none"> 1. Feedback on public meeting format, date/time, location, potential meeting places and best ways to inform people. 2. Feedback on what topics/ questions should be addressed at the public meeting. 3. Feedback on best way to inform people. 	<p>Response to CAP recommendations:</p> <ol style="list-style-type: none"> 1. The COSCOPE team will work on organizing two public meetings; one online and on in-person. Meetings will be held within the same week, will be recorded and available online for viewing. For in-person meeting location, the team will work with Mesa Ridge High School and Widefield Community Center to see which space works best. 2. The COSCOPE team will develop a "cheat sheet" to pass out with other fact sheets, for participants to reference through the meetings. 3. The CAP mentioned that adding an info sheet to the Security water bill again and a Facebook group would be a good place to advertise for the meeting(s).
06-07-23	<p>CAP Recommendations:</p> <ol style="list-style-type: none"> 1. Incorporate CAP input into the refinement of the Mock PFAS blood results dashboard 	<p>Response to CAP recommendations:</p> <ol style="list-style-type: none"> 1. Margaret/CDPHE will update dashboard based on CAP input. CDPHE will share refined dashboard with CAP members and ask for any further input through a Zoom meeting.
02-08-23	<p>CAP Recommendations:</p> <ol style="list-style-type: none"> 1. Feedback on the supplemental fact sheet from CDPHE 	<p>Response to CAP recommendations:</p> <ol style="list-style-type: none"> 1. CDPHE will update fact sheet based on CAP input and share results with CAP.
11-09-22	<p>CAP Recommendations:</p> <p>The Study Team should explore the following for soliciting new Study participants:</p> <ol style="list-style-type: none"> 1. Craft fairs 2. Coffee shops, Big R, lunch spots 	<p>Response to CAP recommendations:</p> <p>The endeavors and results of the Study Team are as follows:</p> <ol style="list-style-type: none"> 1. The Outreach Team has posted flyers and tabled at coffee shops.

	<ol style="list-style-type: none"> High school/club sports teams, football games High school reunion Facebook groups Gazette, Southeast Express, and Mountaineer newspapers Hang flyers in pediatrician offices Can we contact high schools for a list of graduates? What about the military? Explore locations in Colorado Springs where former Fountain Valley Area residents hang out, such as the Bell Brewery downtown. <p>The Study team provided the following ideas for results communication:</p> <p>CAP Actions:</p> <ol style="list-style-type: none"> Share flyers with neighbors and friends. Suggest to Deanna the places to insert flyers during the holidays such as gift baskets from churches and pantries. Suggest to Deanna local events for tabling or handing out flyers. Post to social media Sign up with Deanna to go door-to-door. 	<ol style="list-style-type: none"> Deanna has arranged with Big R to table 2 Saturdays/month. Almost every 3 hour session has brought in 7 signups and over 20 potential enrollments. We are working to gain permissions to attend high school sports and are still looking for high school-related Facebook groups. We learned Fountain Valley News and the Mountaineer newspapers have ceased production, so we'll focus on the Gazette, the Independent, and the Southeast Express. Local pediatrician offices were contacted. Two have accepted flyer posting, and we are waiting for permission to share study materials from UCHHealth and Peak Vista with their patients. We continue to work with schools and military to obtain lists. We have posted in some Colorado Springs buildings and restaurants. <p>The Study team provided the following responses to CAP member Actions:</p> <ol style="list-style-type: none"> New flyers and content to share and post on social media. Local events and libraries were suggested and are now scheduled through the end of the study. Invited CAP members to participate in a new volunteer program.
7-13-22	<p>Cap Recommendations:</p> <ol style="list-style-type: none"> CAP would like outreach and study progress update before October 12th meeting. Talking to your doctor. 	<p>Response to CAP recommendations:</p> <ol style="list-style-type: none"> Deanna will send out an email to CAP members on outreach activities (Dark Waters showing), enrollment, and study progress. Deanna/ Mallory will work with CAP members on providing the "Guidance for Physician" flyers to medical offices around the area.

5-11-22	<p>CAP Recommendations:</p> <ol style="list-style-type: none"> 1. Outreach to Security Mobile Home Park 2. Post flyers near CDPHE's fish-related signs 	<p>Response to CAP recommendations:</p> <ol style="list-style-type: none"> 1. This area will be included in CO SCOPE's canvassing efforts as well as sending out postcards notifying residents of the study. 2. Study will look into posting in these areas, particularly in Spanish
3-09-22	<p>CAP recommendations:</p> <ol style="list-style-type: none"> 1. Recruitment strategies 2. Recruitment events 	<p>Response to CAP recommendations:</p> <ol style="list-style-type: none"> 1. The CAP would like to see familiar faces on outreach materials, such as local residents, CAP members and the study team. We appreciate this feedback and Deanna will get started on bus advertisements and photos of community members, residents and study team members. 2. The CO SCOPE team will begin reaching out to other organizations like the YMCA, Parks and Rec, and churches for distribution of flyers or attending events. Movie night/Dark Water screening is still TBD, as well as the joint ATSDR/ Exposure Assessment in-person meeting.
1-12-22	<p>CAP recommendations:</p> <ol style="list-style-type: none"> 1. EPA rulemaking on PFAS 2. CO SCOPE child recruitment flier 3. CO SCOPE water modeling 4. Outdoor summer activities 	<p>Response to CAP recommendations:</p> <ol style="list-style-type: none"> 1. Dr. Benson will share comments raised by the Water Districts regarding rulemaking. The rulemaking committee meets next month, February, and he will keep the CAP informed during comment periods. 2. We appreciate the CAP members' feedback on the child flier. We will continue to have opportunities for the CAP to provide feedback on additional outreach activities and written materials. 3. Dr. Higgins and his Team will investigate the 3 ideas raised

		<p>regarding potential other sources of PFAS contamination in Fountain.</p> <p>4. Tamara Estes will connect Deanna with contacts at Park and Rec to help coordinate outdoor movie nights.</p>
11-10-21	<p>CAP recommendations:</p> <ol style="list-style-type: none"> 1. CAP input from study office visits 2. Targeted recruitment- Water district mailings 3. Other outreach information <ol style="list-style-type: none"> a. Social media and El Paso County Health Department b. PeachJar and high schools recruitment c. Postcards 4. Local Community Engagement- ATSDR Workgroup 5. Next CAP Meeting topics 	<p>Response to CAP recommendations:</p> <ol style="list-style-type: none"> 1. We appreciate the CAP members that provided feedback on their office visit. We will work on providing a list of questions beforehand for participants to be prepared before the office visits. We will address any additional recommendations affecting the office flow that come through CAP members and participants moving forward. 2. We are committed to engaging with the full population of the Fountain Valley Communities. Mallory O'Brien and Deanna Kulbeth will work with apartment complexes and landlords in the area to reach residents and families that do not receive individual water bills. 3. The Study Team appreciates the CAP's individual outreach efforts and will be happy to supply more fliers and offer presentation opportunities. Contact Deanna Kulbeth at the study office for more information. <ol style="list-style-type: none"> a. Mallory O'Brien will email approved social media posts to Kat McGarvy, El Paso County Health Department, for her to bring to the El Paso County Health Department communication team to potentially post on their social media platforms. b. Our child recruitment has been low and CAP recommended we reach out to school boards and offer

		<p>presentations. Deanna Kulbeth has connections to schools and will reach out soon after the Press Release. Deanna will look into our team participating in high school job fairs to help recruit that age group.</p> <p>c. We are acting in the direction of developing personalized postcards for CAP members to pass out throughout the Fountain Valley Community.</p> <p>4. We appreciate the time CAP members Liz Rosenbaum, Tamara Estes, and Robin and Carrie Bell have dedicated to participate in the ATSDR-hosted meeting, Local Community Engagement, on December 6th. We plan to address the recommendations they are interested in adopting as it relates to communication, community outreach, and the overall monitoring and evaluation of the study.</p> <p>5. We plan to give an overview on EPA's actions to address PFAS and Colorado School of Mines water modeling.</p>
6-21-21	<p>CAP recommendations:</p> <ol style="list-style-type: none"> 1. Make recommended changes to the one-stop shopping website. 2. Have an open house at the new study office. Make this open to the community. 3. Participate in community events including: Fourth of July Fire Department Breakfast; Fountain Fall Festival; Thunder in the Valley; events at Peaks and Pines Brewery. 	<p>Response to CAP recommendations:</p> <ol style="list-style-type: none"> 1. We will work on improving the formatting of the website, so it works well on all device types including mobile phones. We will address any additional recommendations that come through CAP members moving forward. 2. We plan to have an open house at the study office in September 2021. We will make this event open to the community as suggested by CAP members. We will consider having a raffle for a local gift card to encourage attendance. 3. We will investigate having an information and sign-up booth at the

		<p>Fountain Fall Festival and Thunder in the Valley. Unfortunately, due to the short timeline we will not be able to have staff at the Fourth of July Fire Station Breakfast. Further, we will investigate attendance or participation in events at Pikes and Pines Brewery.</p>
3-2 21	<p>CAP recommendations:</p> <ol style="list-style-type: none"> 1. CAP members recommend posting on the following Facebook pages: <ul style="list-style-type: none"> o Security/Widefield Residents o WSD3 Rant/ Rave Make Friends o Lorson Ranch Resident o Lorson Ranch Community o Positively Fountain o El Paso County Public Health can promote social media through their Facebook account 2. CAP members recommend posting on Twitter, Instagram, Tik Tok, and NextDoor. CAP members recommended a number of hashtags to consider for Instagram. 3. CAP members recommend watching how the Parler and GAB sites progress and consider posting on them. 4. CAP members recommend reaching out to local Hispanic leaders to seek their input on the best ways to reach the Hispanic community. In particular, they recommend touching base with: <ul style="list-style-type: none"> • John Spears at Pikes Peak Library District ESL • El Pomar Foundation has a Hispanic Emerging Leaders Development program • John Aldaz at Colorado Springs Hispanic Business Council 	<ol style="list-style-type: none"> 1. We have made note of these recommendations and will add these groups to the list of Facebook groups we plan to engage with during our social media campaign. 2. We plan to engage in all of these suggested social media platforms. We appreciate the great hashtag suggestions and will plan to experiment with various options to see which are most effective at reaching a wide audience. 3. We are committed to engaging with the full population of the Fountain Valley Communities and will watch as the platforms Parler and GAB evolve to determine if they are appropriate platforms to advertise CO SCOPE on. 4. The Study Team appreciates the CAP's suggestions of people to reach out to and will use those individuals as a starting point in our outreach efforts. Kristi Celico will reach out to these individuals to get more information on organizations we should involve in our recruitment plan, as well as determine if any of these people may be a good addition (or know someone who would be a good addition) to the CAP. 5. We appreciate the suggestions about different groups of people to target. <ul style="list-style-type: none"> • We are internally brainstorming ways to contact members of the military community who may have been exposed to PFAS previously but no longer live in the area. One challenge with this population is that if they are interested in participating but are no

	<ul style="list-style-type: none"> • Tamara Estes offered to reach out to the City Council member who is part of the Spanish-speaking community. • Sarah McKinney speaks Spanish and can assist as needed. <p>5. The CAP also recommended considering the following:</p> <ul style="list-style-type: none"> • Develop methods for targeting military families who might have moved. • Sarah McKinney could help promote the Study through her regular advertising. • Need to identify ways to reach the elderly community. Many use Facebook. Also recommend reaching out to Fountain Valley Senior Center. <p>6. The CAP provided detailed recommendations for improving the draft flyers shared at the meeting. These flyers and comments can be found in the meeting summary located here: https://www.co-scope.org/community-engagement (See March 2nd Meeting Summary)</p> <p>7. Molly requested additional information regarding the specifics on children's testing.</p>	<p>longer stationed in the area they would have to travel to the study site. That said, we would still like to give these individuals the option to participate should they be eligible, keeping in mind that people who worked directly with firefighting foams as part of their service are not able to participate.</p> <ul style="list-style-type: none"> • We recognize that the elderly may be a more difficult population to engage with, especially during COVID-19. We have investigated outreach via the Fountain Valley Senior Center and, though they are closed right now due to the pandemic, do have regular speakers via zoom as part of their Active Minds program. We plan to reach out to the Center and see if we may give a talk about PFAS and CO SCOPE at one of these events. <p>6. We plan to entirely re-work the recruitment flyers based on the CAP's suggestions and will share the updated versions in the future.</p> <p>7. We have added some additional information into the FAQ section of the website regarding what is involved in children's testing. You can find this information here: https://www.co-scope.org/frequently-asked-questions (See: Participation in Colorado SCOPE)</p>
12-10-20	<p>CAP recommendations:</p> <ol style="list-style-type: none"> 1. Use the term "Fountain Valley Communities" to refer to the Study Area. 2. Provide testing times during the evening and weekends. 3. Consider offering COVID vaccines to those who want it as an incentive to participate in the Study. 4. Consider the ideas of drive-through testing, mobile testing, and/or at-home visits. 	<ol style="list-style-type: none"> 1. We will use the term "Fountain Valley Communities" in study documents moving forward. 2. We are planning to have the office open from Tuesday-Saturday to accommodate weekend visits. We will also plan to have two weekdays of evening hours to accommodate those who need to complete their visit after typical working hours. 3. While we would love to offer COVID vaccines to study participants, this

	<ol style="list-style-type: none"> 5. Put the Covid safety plan on the website and make it broadly available to the public. 6. Look into the following potential office locations: old Gold's Gym, old Ace Hardware, old Physical Therapist office, old Independent Records, and Widefield Square area. 7. Develop one website for all three PFAS studies. 8. Consider using PFASFV.com as a website name. 9. In the study literature, note that the health effects of PFAS exposure can be long term and that PFAS is a persistent chemical. Clarify that participating in the Study should not impact their ability to participate in a lawsuit and/or get health insurance. 10. Advertise in the Fountain Valley newspaper and via NextDoor, Facebook, and Parler 11. Consider advertising on the following radio stations: KRDO, NPR/CPR, KRXP, and IHEARTRADIO. 12. Consider having the Wakefield High School students in the AP Environmental Studies class develop a TikTok video to help reach a younger demographic. 13. Consider placing information within a Security Water District bill and on their website. 	<p>one is beyond our control. There has been some discussion within ATSDR of evaluating both COVID response and COVID vaccine response in relation to PFAS exposure. However, it is highly budget dependent.</p> <ol style="list-style-type: none"> 4. We cannot do home visits due to budget cuts (requiring us to reduce staff numbers) in year one and current COVID restrictions the University of Colorado has in place. We will only revisit home visits as an option if we are given a budget increase next year to make-up for the cut in year 1. We have talked about the drive through testing, and while it is a good idea we do not think it will be feasible given the blood draw, height, weight and blood pressure measurements. 5. We will put the entire COVID safety plan on our website and develop a simplified version of it for study advertisements. 6. We are working with our realtor and have advised him of the CAP's suggestions. 7. We will develop a central website in conjunction with the CO SCOPE website. We still want the study specific website to come up when people google the study name so we will do both. 8. Rather than PFASFV.com we will use PFASFV.org. 9. We will ensure that study advertisements and FAQ documents that we develop address these potential concerns/barriers to participation. 10. We will advertise the study on all suggested social media platforms and local news outlets in order to reach the diverse populations residing in the Fountain Valley Communities. 11. We will advertise the study on all suggested radio stations in order to
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		<p>reach the diverse populations residing in the Fountain Valley Communities.</p> <p>12. We are very enthusiastic about the idea of working with local high school students to develop a PFAS TikTok video; we will meet with Suzanne in January to further these plans.</p> <p>13. We have already discussed advertising the study using water district bills as means of distributing information and will continue working with the Water Authorities to make this happen. We had not considered advertising on the water district websites, but will follow up on that when we begin recruiting next spring.</p>
12-10-20	<p>Facilitator Follow-up:</p> <ul style="list-style-type: none"> Clarify roles of Technical Team and Study Team in the Ground Rules and send a final draft to everyone for consideration. Develop survey for CAP on honorarium and desire to have name/phone number/email on Study website. 	<ul style="list-style-type: none"> Kristi sent an email to CAP with a revised draft on 1-15- Kristi sent an email with a survey link to the CAP on 12-13-20.