### Food Systems Resiliency Webinar Series

Please review the details about how everything will work today until we begin at 10:00 AM.

- This event will be recorded for educational or promotional use by the University of California.
- ☐ Please post your questions in the "Q&A." Questions will be addressed at the end of the program.
- ☐ Use the "Chat" for non-question conversations or comments. Be sure to change the "To" if needed to ensure your Chat is sent to those who you want to send it to.

#### **Options:**

"Panelists" if want to send a Chat only to the speakers

"Everyone" if you'd like all to see your Chat message



# Food Systems Resiliency Webinar Series

UC ANR Strategic Initiatives joint effort to reimagine our food system

Proce

**Processing** 

**Production** 

**UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources** 

Accessibility

# Food Systems Resiliency Series objectives:

- Tour different parts of the Food System to:
- ☐ Improve knowledge and understanding
- □ Identify and share available existing electronic information (resource kits)
- ☐ Identify information gaps
- Brainstorm
- ☐ Recruit additional participants



# Food Systems Resiliency Webinar Series #2

July 28 10 to 11

California Food systems: Partnerships and Resources

Kamal Khaira, moderator



### Dr. Erin DiCaprio

CE Specialist, Community Food Safety Food Science and Technology



### Dr. Alda Pires

CE Specialist, Urban Agriculture and Food Population Health and Reproduction



### Food safety in the COVID-19 era

Erin DiCaprio, M.S., Ph.D.

**Assistant Cooperative Extension Specialist** 



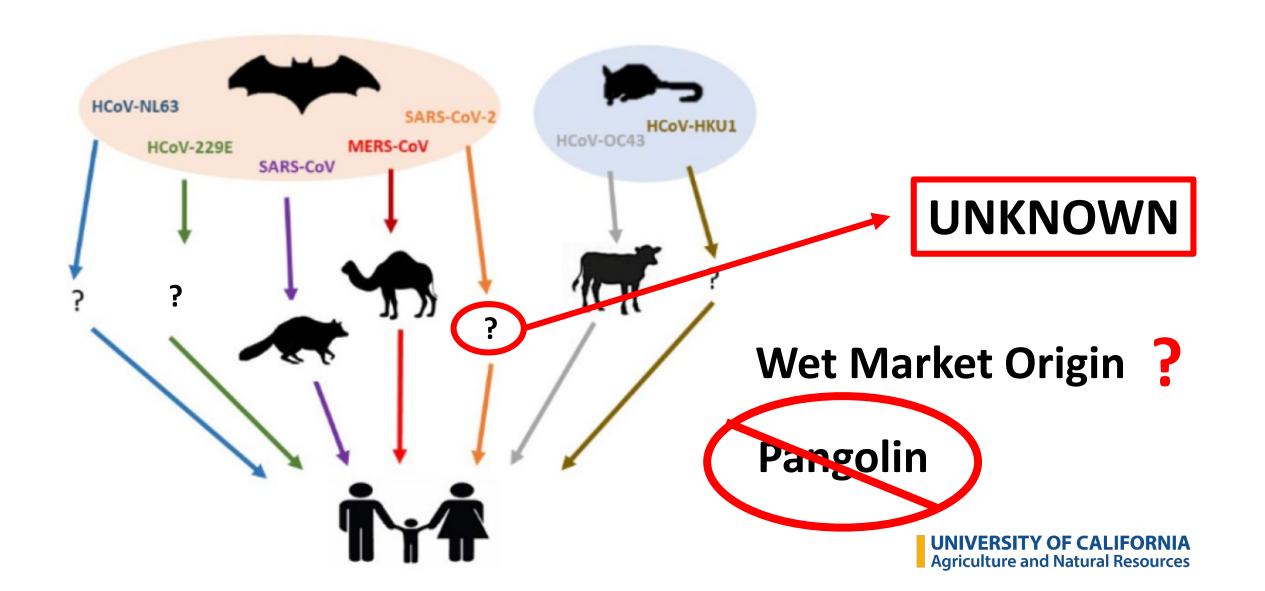


# Did COVID-19 originate from someone eating exotic meat?

YES or NO



### **Origin of SARS-CoV-2**



# Is COVID-19 transmitted by food or food packaging?

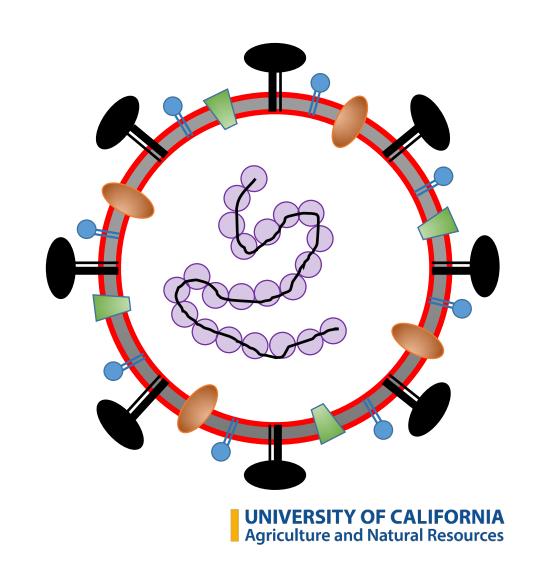
YES or NO



# SARS-CoV-2 No evidence of transmission via food or food packaging

**Enveloped virus** 

Transmission Mode: Respiratory droplet



# Consumer concerns around COVID-19 and food

Resources to support this stakeholder group



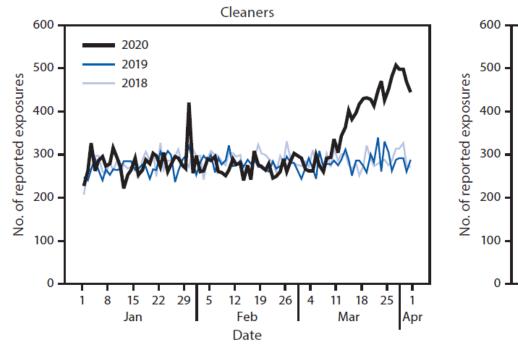
# Since the emergence of SARS-CoV-2 have you changed your food handling procedures at home?

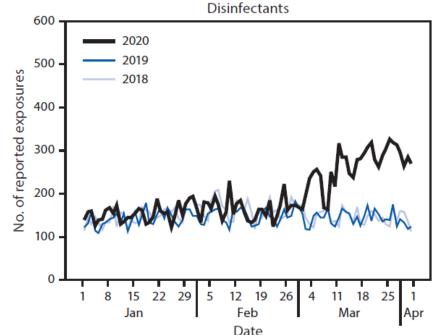
YES or NO



### Misuse of cleaners and disinfectants

FIGURE. Number of daily exposures to cleaners and disinfectants reported to U.S. poison centers — United States, January–March 2018, 2019, and 2020\*,†





Chang A, Schnall AH, Law R, et al. Cleaning and Disinfectant Chemical Exposures and Temporal Associations with COVID-19 — National Poison Data System, United States, January 1, 2020–March 31, 2020. MMWR Morb Mortal Wkly Rep 2020;69:496–498.



Mixing of bleach, vinegar, and hot water to wash produce



### **Concerns and FAQs**

- Is this virus transmitted by food?
- Do I need to sanitize my food or food packaging?
- How can I stay safe while grocery shopping?
- What about farmers' markets and farm stands?
- Is takeout food safe?
- How safe is eating in a restaurant?
- Many others

UCDAVIS

#### **UC Food Safety**

Quick Links

COVID19

PRE- & POST-HARVI

PROCESSING & DISTRIBUTION >

LOW MOISTURE

CONSUMERS



### ucfoodsafety.ucdavis.edu

#### **CoVID19 Food Safety Resources**

UC Food Safety > CoVID19 Food Safety Resources







CoVID-19 Info for Consumers

Food Supply Chain / Industry

For Farms / Growers / Workers

→ Be Safe!

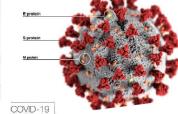


→ Info for You









& For Educators /
Researchers

Webinars & Recordings

→ View Now!





### **Print materials**

UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources

### COVID-19 AND FOOD SAFETY FAQ IS CORONAVIRUS A FOOD SAFETY ISSUE?

CDC and USDA are not aware of any reports at this time of human illnesses that suggest COVID-19 can be transmitted by food or food packaging. However, it is always important to follow good hygiene practices (i.e., wash hands and surfaces often, separate raw meat from other foods, cook to the right temperature, and refrigerate foods promptly) when handling or preparing foods.

#### IS FOOD IMPORTED FROM COUNTRIES AND STATES AFFECTED BY COVID-19 AT RISK OF SPREADING COVID-19?

 Currently, there is no evidence to support transmission of COVID-19 associated with imported goods and there are no reported cases of COVID-19 in the United States associated with imported goods.

#### IF AN EMPLOYEE AT A FOOD ESTABLISHMENT BECAME INFECTED WITH CORONAVIRUS, WOULD THE FOOD PRODUCED AT THAT FACILITY BE SAFE TO EAT?

- Food establishment personnel who are ill with COVID-19 or any other illness should be excluded from work activities that could create unsanitary conditions (i.e. coughing or sneezing on product).
- COVID-19 is thought to spread mainly from person to person through respiratory droplets that can land in the mouths or noses of people who are nearby.

#### CAN I GET SICK WITH COVID-19 FROM TOUCHING FOOD, THE FOOD PACKAGING, OR FOOD CONTACT SURFACES, IF THE CORONAVIRUS WAS PRESENT ON IT?

- Currently there is no evidence of food or food packaging being associated with transmission of COVID-19.
- Coronaviruses need a living host (animal or human) to grow in and cannot grow in food.
- Like other viruses, it is possible that the virus that causes COVID-19 can survive on surfaces or objects.

#### HOW SHOULD FOOD BE HANDLED DURING THE COVID-19 PANDEMIC?

- As always, follow good hygiene and food safety practices when preparing food:
  - Purchase food from reputable sources
  - Cook food thoroughly and maintain safe holding temperatures
  - Use good personal hygiene
  - Clean and sanitize surfaces and equipment

https://ucfoodsafety.ucdavis.edu/sites/g/files/dgvnsk7366/files/files/page/UC Davis Food%20Safety COVID-19 Flyer 040120.pdf



http://www.sactownmag.com/Whats-Cooking/2020/takeout-safety-Q&A/





https://www.cnn.com/2020/05/24/b usiness/buffets-salad-barscoronavirus-reopen-trnd/index.html

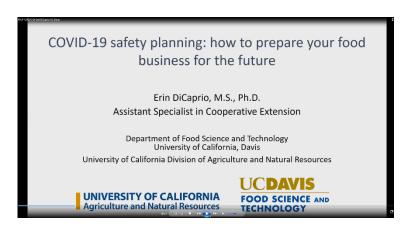
https://theconversation.com/hereshow-to-stay-safe-while-buyinggroceries-amid-the-coronaviruspandemic-138683

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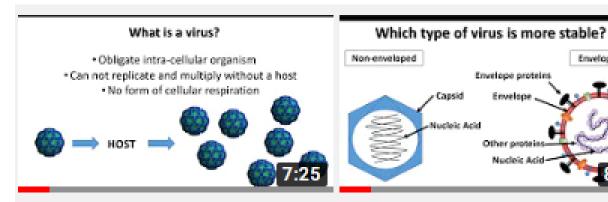
### Recorded webinars and presentations



https://www.youtube.com/watch?v=TICHjPLwcIY

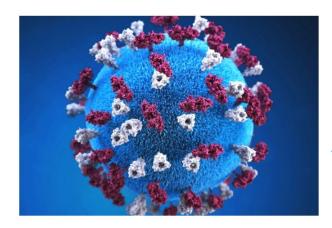


https://drive.google.com/file/d/1iuAMhQlp2q w9lDF4D7XsDNbuN8U3Hd8N/view



#### What is a virus?

https://www.youtube.com/watch?v=IV 5hdJkXmgc&feature=voutu.be



APRIL 30, 2020

#### Foodborne viruses compared to SARS-CoV-2

https://www.youtube.com/watch?v=Kh fXILgG0yg&feature=youtu.be

Enveloped

https://water-talk.squarespace.com/

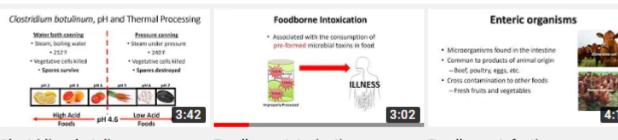
#### **Episode 03: The Food-Water-Virus Nexus**

A conversation with Dr. Erin DiCaprio about basic virology, virus transmission in food and water systems, COVID-19 + food safety, and canning/preservation at home.



# Support for home preservers and food entrepreneurs

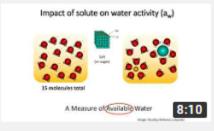
Resources to support this stakeholder group



#### Clostridium botulinum Foodborne Intoxications







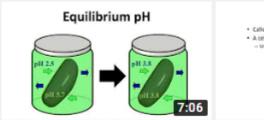
Types of Foodborne Hazards

Major Pathogens -

Estimated Deaths: 1.400/year

Food Preservation

Water Activity







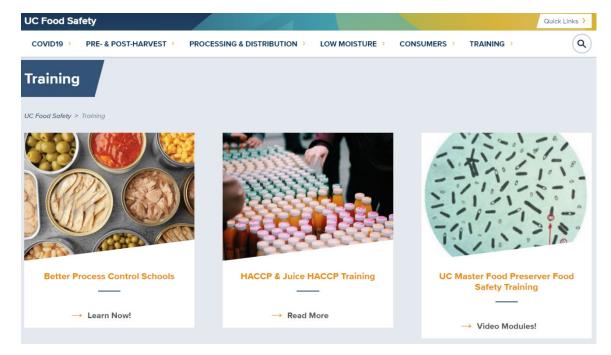
Acidity Temperature and Time

Food and Oxygen



Microorganisms in Food Food Spoilage

# Online food preservation safety training



https://ucfoodsafety.ucdavis.edu/training

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#### **Food Safety Regulation Flow Chart**



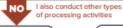
#### FSMA Produce Safety Rule

Are you washing, packing, and/or labeling raw agricultural commodities (RACs)1 or manipulating the ripening of RACs?



#### Safety Rule

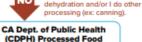
Your activity falls under and is subject to the FSMA Produce Rule<sup>2</sup>



If your value-added product is juice then the Are you only FDA Juice HACCP Regulation<sup>6</sup> applies and a making juice? CA PFR<sup>6</sup> is required.



Is your process limited to dehydrating uncut produce or another "low risk" activity?



The crop is cut prior to

Registration (PFR) is the product you are making considered low risk??

High risk products require both a **CDPH Cannery** 

License® and/or CDPH PFR<sup>6</sup>

Continue on for FDA requirements

Do you have <\$1,079,963 in annual sales?

NO

Do you have less than 500 employees?

#### **FSMA Preventive** Controls for Human Food

You are subject to the full requirements of the PC for Human Food

#### You are a qualified facility under the Preventive Controls Rule for Human food and are exempt from a portion of the regulation. You must register with FDA and submit certain attestations about your business's food

safety practices. Q. H

Are your on-farm

processing

activities

considered

"low risk" by

the FDA10?

#### FSMA Produce

#### CA Cottage Food Law YES Is the product you are making on the approved cottage food list?3

YES **CA Cottage Food Law** 

#### Are your annual sales <\$50,000 and meet customer requirements4?

You CAN produce this product under the CA Cottage Food Law

#### **CDPH Processed Food** Registration (PFR)

Your value-added product requires a PFR.6 Continue for FDA requirements.

Organic products need an Organic PFR7 submitted as well.

Do you process The business is your product(s) in not required to a facility that is register with YES classified as a FDA and the retail food PC Rule does establishment10? not apply.

YES

The farm is exempt from the full PC Rule Requirements. This scenario is considered a farm

mixed-type facility so you must follow CGMPs and certain recordkeeping and training requirements.14,15

 California Regulations Federal Regulations

### Food safety, product development, and regulatory compliance for food processors and entrepreneurs

- Starting a food business
- Regulatory considerations
- Resources based on different types of products
- Training opportunities
- More

https://ucfoodsafety.ucdavis.edu/processing-distribution

Do you know or have you heard of local restaurants or farms pivoting to sell value-added products as a result of disruptions in supply chains/patronage due to COVID-19?

YES or NO



Do you know or have you heard of farms that have transitioned from growing flowers or grains to growing raw agriculture commodities (fruits and vegetables) as a result of the pandemic?

YES or NO



### Food safety in the COVID-19 era

Alda Pires, DVM, MPVM, Ph.D., DACVPM Associate Cooperative Extension Specialist





# On-Farm concerns around COVID-19

Resources to support this stakeholder group

What is the biggest impact on-farm you have seen with COVID-19?

Food safety

Worker Health & Safety

**Distribution** 

**Food Security** 

Does not apply; I don't work with farmers



**On-Farm Fresh Produce Food Safety** 

- Not a food safety concern
- If you are implementing GAP probably should keep it









https://www.wifss.ucdavis.edu/fsma2020/

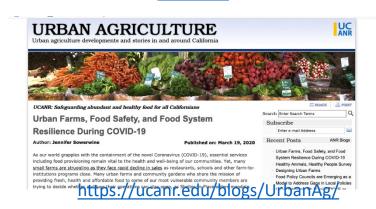


### **UC ANR Resources**

### Agritourism Urban Agriculture



https://ucanr.edu/sites/agritourism/activities/Farmstands/



### UC ANR Coronavirus & COVID19



https://ucanr.edu/Coronavirus and COVID-19/

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**U-Pick Farms Workers in California** 



https://ucfoodsafety.ucdavis.edu/covid19-food-safetyresources/For-farms-growers-workers

### Is COVID-19 a concern for livestock?

YES or NO



### **On-Farm Food Safety: Livestock & Transmission**

 There is no evidence that domestic animals, including pets and livestock play a significant role in spreading SARS-CoV-2 to people (AVMA, July 11, 2020)

#### **COVID-19 FAQs**

Q: CAN PETS SPREAD COVID-19 TO PEOPLE?



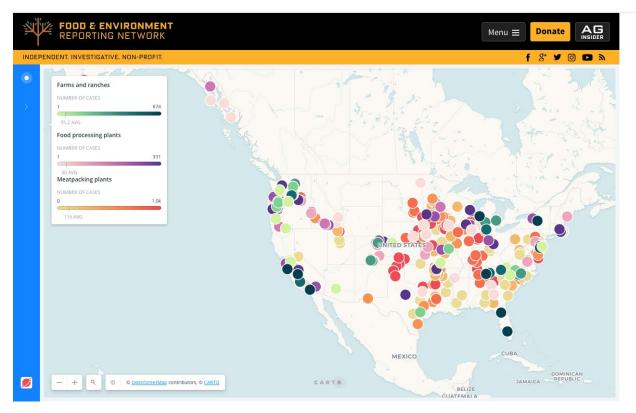
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https://www.avma.org/resources-tools/animal-healthand-welfare/covid-19

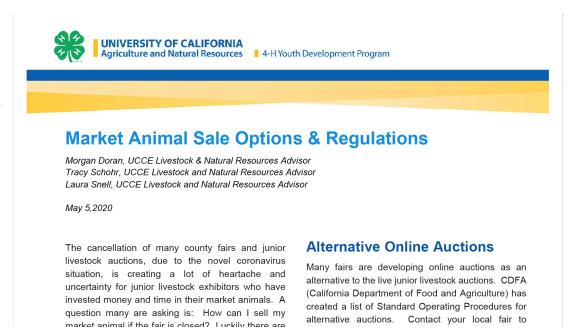
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### **On-Farm Food Safety: Livestock & Transmission**

Distribution and Food Supply



https://thefern.org/2020/04/mapping-covid-19-in-meat-and-food-processing-plants/



https://ucanr.edu/sites/Rangelands/files/323971.pdf

Food Systems Webinar Series:

Webinar #4 - Beef Supply Chain & Market Disruptions Tuesday, August 25, 10-11 AM PT



### **Agricultural Worker Health & Safety**



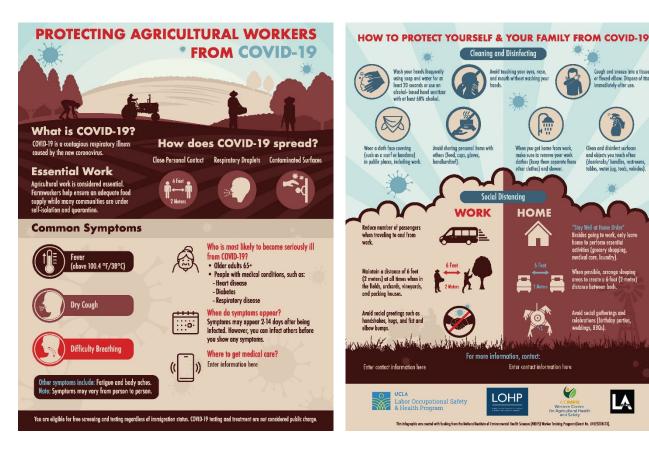


Have you been contacted by agricultural operators or associated industry with questions regarding worker health & safety & COVID-19? YES or NO



### **Agricultural Worker Health & Safety: Concerns**

 Challenges of implementing guidelines on agricultural operations



https://aghealth.ucdavis.edu/covid19#resources



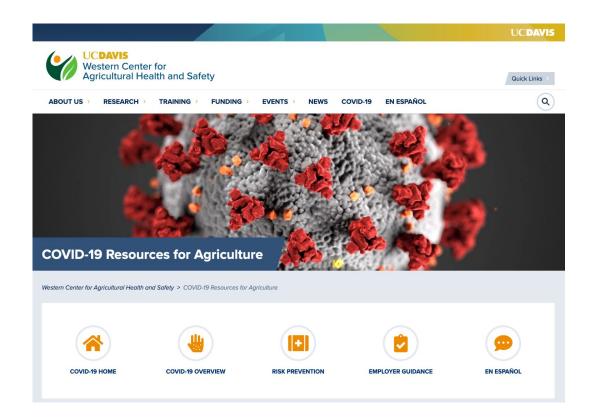
Cough and sneeze into a tissue

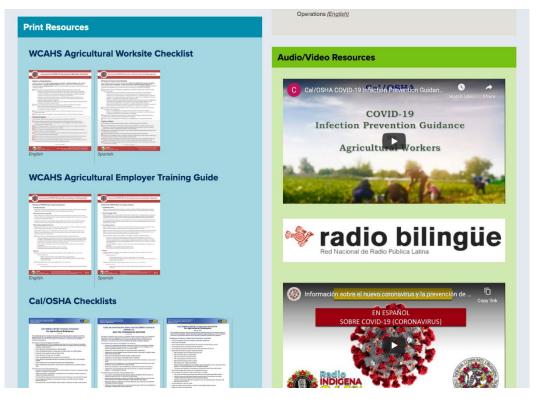
or flexed elbow. Dispose of tissue

Clean and disinfect surface

and objects you touch often

### **UC Davis Resources**





https://aghealth.ucdavis.edu/covid19#resources

### **Agricultural Worker Health & Safety**



TIPS: Educating Farmworkers on COVID-19

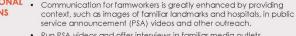
OUTREACH



- Visit every location you can to provide signs, posters, training materials, videos and answer questions.
- Leverage existing food safety programs to partner with local healthcare providers for on-farm training.

CREATE PERSONAL CONNECTIONS

1111



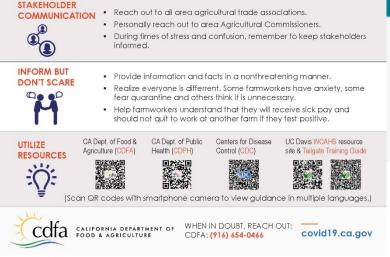
 Run PSA videos and offer interviews in familiar media outlets (Univision TV, Telemundo TV, various language radio stations, etc.).

RADIO, RADIO & MORE RADIO

- Run radio PSAs in farmworker native languages (Spanish, Mixtec, Hmong, etc.) for multiple months.
- Participate in talk-radio broadcasts.
- · Play radio PSAs for farmworkers during first few weeks of hiring process.
- · Consider farmworker needs and traditions when selecting media format.

 CDC Guidance for Agriculture Workers & Employers & Agricultural Employer Check List







Coronavirus ▼ Q

Advanced Search @

https://www.cdfa.ca.gov/coronavirus/pdfs/TIPS EducatingFarmworkersCOVID-19.pdf https://www.cdc.gov/coronavirus/ 2019-ncov/community/guidanceagricultural-workers.html

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https://www.cdfa.ca.gov/coronavirus/pdfs/COVID -19PrevenEducateRespond.pdf

### Transition to Q & A

Did the information provided improve your knowledge and understanding of food safety issues related to COVID19?

Yes definitely, somewhat, not much, no



# Were the electronic resources new to you?

Yes definitely, somewhat, not much, no



# Will you use information from today's webinar with your clientele?

Yes definitely, somewhat, not much, no



Q1 What educational outreach curriculum needs have you identified related to food system resilience?

Q2 What research gaps exist related to food system resilience?

Q3 Which community partners might be interested in working on food system resilience research, education or solutions?



Q4 Might you consider working collaboratively to develop a research project or educational curriculum related to today's webinar topic?

Q5 Are you available to participate in a future webinar presentation?



#### Food Systems Resiliency Webinar Series #2

#### 10 to 11 am

### California Food systems: Partnerships and Resources

Registration at: <a href="http://ucanr.edu/survey/survey.cfm?surveynumber=30590">http://ucanr.edu/survey/survey.cfm?surveynumber=30590</a>

Learn more about programs, resources and services that can support our children and families during this unprecedented time. The main topics will cover ways to secure benefits and access nutritious foods. Speakers include:

Brian Kaiser, Bureau Chief Cal Fresh and Nutrition Program Family Engagement and Empowerment Division, CA Dept of Social Services,

Andy Naja-Riese, CEO Agricultural Institute of Marin, and Leyla Marandi, Program Manager California Food for California Kids Center for Ecoliteracy