

GenIC Clearance for CDC/ATSDR
Formative Research and Tool Development

**Food Safety Communication Evaluation:
Assessing Food Safety Messages, Knowledge,
and Attitudes**

Attachment 12 – Messages for testing

Contact: Sara Bresee, MPH

Office of the Director

Division of Foodborne, Waterborne, and Environmental Diseases

Centers for Disease Control and Prevention

1600 Clifton Road, NE

Atlanta, Georgia 30333

Phone: (404) 639.3371

Email: yla4@cdc.gov

Messages for testing

Message/content (also add in if there is anything specific you would like to test—like focus on the colors etc).	What	Audience	POC/Branch
 Compare these messages: • Washing raw chicken does not prevent illness, and can actually spread bacteria to other foods, utensils, and surfaces through splashing. To kill germs, cook chicken and other poultry to 165°F. • Washing raw chicken can spread germs and make you sick. If you wash it, immediately clean and thoroughly sanitize sink and surrounding area. USDA study: 1 in 7 people who cleaned sink after washing chicken still had germs in the sink. • Washing chicken can spread germs and make you sick. Instead of washing, you could pat chicken dry with a paper towel and throw towel away. Immediately wash hands and sanitize surfaces the chicken touched. • Raw chicken is ready to cook. It doesn't need to be washed first. According to a USDA study, 1 in 7 people who cleaned their sink after washing chicken still had germs in the sink. If you choose to wash chicken, do so as safely as	SM post and potential website content – want to see which people prefer and which is most likely to cause behavior change, 1) cook to kill germs, 2) washing spreads germs, 3) paper towel alternative, 4) safe way to wash chicken	Maybe target: AA/Black individuals H/L Older adults	Kelsey/Cara

possible: 1. Run the water gently over the chicken to reduce splashing. 2. Then immediately clean the sink & area around the sink with hot soapy water & sanitize thoroughly. 3. Wash your hands for 20 seconds. Wash chicken vs rinse chicken			
Refrigerate perishable food within 2 hours. If the food is exposed to temperatures above 90°F (like a hot car or picnic), refrigerate it within 1 hour. Refrigerate perishable food (including meat, chicken, turkey, seafood, eggs, cut fruit, cooked rice, and leftovers) within 2 hours. If the food is exposed to temperatures above 90°F (like a hot car or picnic), refrigerate it within 1 hour.	Message, specifically interested in people's understanding of (1) "perishable", (2) the 1 hour exception and (3) the examples of perishable		Kelsey
Use a food thermometer to ensure foods are cooked to a safe internal temperature: • Fish with fins: 145°F or cook until flesh is opaque • Fish with fins: 145°F or cook until flesh separates easily with a fork	Message, want to know what description of "done" is easier to understand or if they have suggestions		Kelsey
OR • Keep raw chicken and its juices away from ready-to-eat foods. • Keep raw chicken and its juices away from ready-to-eat foods, like salads or food that is already cooked.	Message, want to know if they understand ready-to-eat or need the examples		Kelsey
OR • Always wash hands after handling uncooked meat, poultry, seafood, flour, or eggs. • Always wash hands after handling uncooked meat, chicken and other poultry, seafood, flour, or eggs.	Message, want to know if they understand "poultry" or need the chicken example		Kelsey

Use a food thermometer to ensure foods are cooked to a safe internal temperature: • Whole cuts of beef, veal, lamb, and pork, including fresh ham (raw): 145°F (then allow the meat to rest for 3 minutes before carving or eating) • Whole cuts of beef, veal, lamb, and pork, including fresh ham (raw): 145°F (then allow the meat to sit untouched for 3 minutes before carving or eating)	Message, want to see what is easier to understand (rest or sit, untouched)		Kelsey
FSEM infographic with all steps 	Full infographic with messages and images (more realistic than those tested in the past)		Kelsey/Cara
Updated food poisoning symptoms searchable	Web page –		Kelsey

table

How Soon Do Symptoms Start?

Some germs make you sick within a few hours after you swallow them. Others may take a few days to make you sick. This table provides details about the symptoms caused by different germs, when they usually start, and common sources for those germs. Search the table for symptoms you are having.

Search			
When Symptoms Begin	Symptoms	Germs	Common Sources
30 minutes to 8 hours	Nausea, vomiting, stomach cramps, diarrhea	<i>Staphylococcus aureus</i> (Staph food poisoning)	Foods that are not cooked after handling, such as sliced meats, puddings, pastries, and sandwiches
Within 24 hours	Watery diarrhea, nausea, stomach cramps, vomiting, fever, chills	<i>Vibrio</i>	Raw or undercooked shellfish, particularly oysters
6 to 24 hours	Diarrhea, stomach cramps that last for less than 24 hours—vomiting and fever are not common	<i>Clostridium perfringens</i>	Meat, poultry, gravies, and other foods cooked in large batches and held at an unsafe temperature
6 hours to 6 days	Diarrhea (can be bloody), fever, stomach cramps, vomiting	<i>Salmonella</i>	Raw or undercooked chicken, turkey, and other meats; eggs; unpasteurized (raw) milk and juice; raw fruits and vegetables, many animals, including backyard poultry, reptiles and amphibians, and rodents (pocket pets)
12 to 48 hours	Diarrhea, vomiting, nausea, stomach pain—fever, headache, and body aches are also possible	<i>Norovirus</i>	Leafy greens, fresh fruits, shellfish (such as raw oysters), contaminated water, infected person, touching surfaces that have the virus on them
18 to 36 hours	Difficulty swallowing, muscle weakness, double or blurred vision, drooping eyelids, slurred speech, and difficulty moving eyes - symptoms start in the head and move down as the illness gets worse	<i>Clostridium botulinum</i> (Botulism)	Improperly canned or fermented foods, homemade illicit alcohol (pruno)
2 to 5 days	Diarrhea (often bloody), fever, stomach cramps	<i>Campylobacter</i>	Raw or undercooked poultry, raw (unpasteurized) milk, contaminated water, pets (including cats and dogs)
3 to 4 days	Severe stomach cramps, diarrhea (often bloody), vomiting Long-term effects: Around 5–10% of people diagnosed with E. coli develop a life-threatening health problem called hemolytic uremic syndrome	<i>E. coli</i> (Escherichia coli)	Raw or undercooked ground beef, raw (unpasteurized) milk and juice, raw vegetables (such as lettuce), raw sprouts, and contaminated water
1 week	Watery diarrhea, loss of appetite, weight loss, stomach cramps, bloating, increased gas, nausea, fatigue	<i>Cyclospora</i>	Raw fruits or vegetables and herbs
2 weeks	Fever and flu-like symptoms (such as muscle aches and fatigue), headache, stiff neck, confusion, loss of balance, and seizures People who are pregnant: Infections during pregnancy can lead to miscarriage, stillbirth, premature delivery, or life-threatening infection of the newborn. Call the doctor right away if you have a fever and feel more tired and achy than usual.	<i>Listeria</i> (invasive illness)	Queso fresco and other soft cheeses, raw sprouts, melons, hot dogs, pâtés, deli meats, smoked fish, and raw (unpasteurized) milk

Food Poisoning Symptoms | CDC

Riskier/safer foods table for high-risk groups

Safer Food Choices for People with Weakened Immune Systems

Help Prevent Food Poisoning

When it comes to preventing food poisoning for those with weakened immune systems, some foods are a safer choice than others.

Food to Avoid	Food to Eat
Poultry & Meat - Raw or undercooked chicken, other poultry, or meat - Undercooked deli meat, cold cuts, hot dogs, and luncheon meats - Unpasteurized (raw) milk - Unpasteurized (raw) meat	- Well-cooked, cold cuts, hot dogs, and luncheon meats - Well-cooked poultry or meat - Shelf-stable (canned) or meat spreads - Meats and meat spreads that have been cooked to 165°F - Shelf-stable (canned) or meat spreads - Shelf-stable (canned) or meat spreads
Seafood - Raw or undercooked fish, shellfish, or food containing raw or undercooked seafood - Raw or undercooked shellfish, such as oysters, clams, mussels, and scallops - Unpasteurized (raw) milk - Unpasteurized (raw) meat	- Well-cooked fish, shellfish, or food containing well-cooked seafood - Well-cooked seafood, such as oysters, clams, mussels, and scallops - Shelf-stable (canned) or meat spreads - Meats and meat spreads that have been cooked to 165°F - Shelf-stable (canned) or meat spreads
Deli salads - Unpasteurized (raw) milk - Unpasteurized (raw) meat	- Well-cooked, cold cuts, hot dogs, and luncheon meats - Well-cooked poultry or meat - Shelf-stable (canned) or meat spreads - Meats and meat spreads that have been cooked to 165°F - Shelf-stable (canned) or meat spreads

Food to Avoid	Food to Eat
Vegetables & Fruits - Unpasteurized (raw) milk - Unpasteurized (raw) meat	- Well-cooked, cold cuts, hot dogs, and luncheon meats - Well-cooked poultry or meat - Shelf-stable (canned) or meat spreads - Meats and meat spreads that have been cooked to 165°F - Shelf-stable (canned) or meat spreads
Milk - Unpasteurized (raw) milk - Unpasteurized (raw) meat	- Well-cooked, cold cuts, hot dogs, and luncheon meats - Well-cooked poultry or meat - Shelf-stable (canned) or meat spreads - Meats and meat spreads that have been cooked to 165°F - Shelf-stable (canned) or meat spreads
Eggs - Unpasteurized (raw) milk - Unpasteurized (raw) meat	- Well-cooked, cold cuts, hot dogs, and luncheon meats - Well-cooked poultry or meat - Shelf-stable (canned) or meat spreads - Meats and meat spreads that have been cooked to 165°F - Shelf-stable (canned) or meat spreads
Meat - Unpasteurized (raw) milk - Unpasteurized (raw) meat	- Well-cooked, cold cuts, hot dogs, and luncheon meats - Well-cooked poultry or meat - Shelf-stable (canned) or meat spreads - Meats and meat spreads that have been cooked to 165°F - Shelf-stable (canned) or meat spreads
Deli salads - Unpasteurized (raw) milk - Unpasteurized (raw) meat	- Well-cooked, cold cuts, hot dogs, and luncheon meats - Well-cooked poultry or meat - Shelf-stable (canned) or meat spreads - Meats and meat spreads that have been cooked to 165°F - Shelf-stable (canned) or meat spreads

test desktop and mobile version of table

Web page – the content is still under review and then we will build out the table (there is a different table for each group) and an infographic based on this content

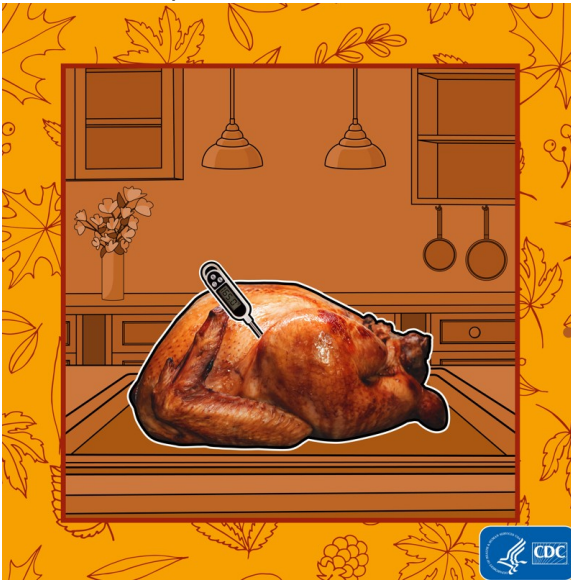
All high-risk groups

Kelsey

cooking meat graphics: [thanksgiving mom](#), [turkey bear](#), [superhero post](#), [rules of the game](#), [grilling](#), [holiday](#), and [winter holiday meat video](#)

Messages, pick a few for participants to

Kelsey

	see side-by-side and state preference and why and which are most likely to impact behavior change		
New winter 2022 graphics with food thermometer placement in meat 	Graphic, want to know if they find it helpful to be shown and told where to place the thermometer and if that will impact behavior change. This version will be updated soon to be a GIF that shows the different places that need to be checked.		Kelsey
People who have 1 cutting board message-write message that explains to wash it in between uses, or just cut meat last cut fruits and veggies first then wash cutting board with soap and hot water before cutting raw meat on it	Health equity related message, since kitchen tools may be expensive.		
Show video of a physician giving advice	Healthcare provider was most popular choice for people to pick where they want Food safety info from (PN styles): can we explore web		

	or social messages from a doctor? (ie. Create a new video)		
Behavior/perception question: Explore what makes certain races (from our research, non-white) more worried about getting sick from salmonella in chicken			
Soft cheeses recommendation		Pregnant people	
food safety in an emergency messages and graphics  	SM	General public	Kelsey/Cara
Different kinds of chicken images			



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LOWER PRIORITY for OD comms			
Compare raw flour: stock image post , family post , and cartoon post			Sarah D
test this page: https://www.cdc.gov/foodsafety/communication/no-raw-dough.html			Sarah D
Raw Milk messaging (Raw Milk Questions and Answers Raw Milk Food Safety CDC)	Explore how people feel about messaging including special focus on more “fear based messaging” and what is most likely to impact behavior change	“moveable middle” of raw milk drinkers	SD
Food waste prevention messages pulled from Tips to Reduce Food Waste FDA	Health equity issue- need to		

“Ugly” fruits and vegetables are still food safe! “Ugly” produce has physical imperfections but are not damaged or rotten. “Ugly” fruits and vegetables are safe and nutritious and can sometimes be found at discounted prices. Do you have any fruit or vegetables that are bruised or damaged? Before you eat them, you can cut away any damaged or bruised areas to prevent food waste. Pulled from Fruit and Vegetable Safety CDC	talk to SMEs about this, but we are not conscious of some of our wording on our pages (ie don't buy ugly vegetables/free its) If we could get SMEs to agree on any of these messages, it would be great to test graphics		
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WDPB

Message/content (also add in if there is anything specific you would like to test—like focus on the colors etc).	What (SM/inforgraphic/message)	Audience (see audience list above)	POC/Branch
Cronobacter prevention infographic (cdc.gov)	Infographic	Mothers and caretakers of infants	Ashley Andujar/WDPB Brittany Robinson, WDPB

ORPB

Message/content (also add in if there is anything specific you would like to test—like focus on the colors etc).	What (SM/inforgraphic/message)	Audience (see audience list above)	POC/Branch
Do not eat recalled ground beef. Throw it away. <i>Context: Looking to find out what people in these groups would do if they read this message. Would they follow the advice, or would they consider cooking it rather than wasting the food?</i>	Message	Lower income people/ People who use food banks AI/AN people, people living in non-metro areas, people	ORPB Comms

		with no access to cars -people who cook/eat ground beef at home	
Do not eat recalled ground beef. Throw it away or return it to the store. <i>Context: Looking to find out what people in these groups would do if they read this message. In comparison to the message above, would they follow this advice given the option to return for a refund or would they still consider cooking it rather than wasting the food?</i>	Message	Lower income people/ People who use food banks AI/AN people, people living in non-metro areas, people with no access to cars -people who cook/eat ground beef at home	ORPB Comms
What People at Higher Risk Should Do You are at higher risk for severe Listeria illness if you are pregnant, aged 65 or older, or have a weakened immune system due to certain medical conditions or treatments. If you are not in these groups, you are unlikely to get very sick from Listeria. <i>Listeria</i> is especially harmful if you are pregnant, aged 65 or older, or have a weakened immune system due to certain medical conditions or treatments. If you are pregnant, it can cause pregnancy loss, premature birth, or a life-threatening infection in your newborn. Other people can be infected with <i>Listeria</i>, but they rarely become seriously ill.	Web screenshot?	-older adults 65+ -Pregnant people -Immuno-compromised -People who are not in the high risk groups -parents to children under 5	ORPB Comms
Listeria – new infographic for pregnant people in English and Spanish (draft)  332018-AP5 Listeria-Pregnancy DRAFT_201	Factsheet	Pregnant people	ORPB Comms
Listeria – existing fotonovela (English PDF, Español PDF)		Hispanic/L pregenant people	
Listeria factsheet for older adults Listeria – new infographic for older adults and	Factsheet	Older adults 65+	ORPB Comms

people with weakened immune system (draft)  332018-C_F5_Listeria-OlderAdults.pdf			
E. coli/Salmonella/Listeria symptoms module in outbreak postings <i>Context: These symptoms modules have been used for many years with few changes. We're looking for feedback on the understandability or usefulness of their content from a variety of audiences.</i> Symptom language from here - Questions and Answers Salmonella CDC - Salmonella Outbreak Linked to Pet Bearded Dragons CDC - Symptom language from: Listeria Outbreak Linked to Enoki Mushrooms CDC symptoms from this page CDC Issues Update on Search for Source of Midwestern E. coli Outbreak CDC Online Newsroom CDC <i>E.coli on outbreak pages</i> About E. coli: • Symptoms of Shiga toxin-producing <i>coli</i> (STEC) infection vary for each person, but often include severe stomach cramps, diarrhea (often bloody), and vomiting. Some people may have a fever, which usually is not very high (less than 101°F/38.5°C). • Most people get better within 5 to 7 days. Some infections are very mild, but others are severe or even life-threatening. • Most people with a STEC infection start feeling sick 3 to 4 days after eating or drinking something that contains the bacteria. However, illnesses can start anywhere from 1 to 10 days after exposure.	Message/web text	-H/L individuals -AA/Black individuals -Parents to children under 5 -Older adults 65+ -Pregnant people (one H/L pregnant one?) -Immuno-compromised	ORPB Comms

<i>E.coli</i> Symptoms of Shiga toxin-producing <i>E. coli</i> (STEC) infection vary for each person, but often include severe stomach cramps, diarrhea (often bloody), and vomiting. Some people may have a fever, which usually is not very high (less than 101°F/38.5°C). Most people get better within 5 to 7 days. Some infections are very mild, but others are severe or even life-threatening. Most people with a STEC infection start feeling sick 3 to 4 days after eating or drinking something that contains the bacteria. However, illnesses can start anywhere from 1 to 10 days after exposure. Contact your healthcare provider if you have diarrhea that lasts for more than 3 days or diarrhea that is accompanied by a fever higher than 102°F, bloody diarrhea, or so much vomiting that you cannot keep liquids down and you pass very little urine.			
Many groceries stores have shopper card or store loyalty programs. Enroll in these programs to track your grocery purchases. Shopper records can provide important information on foods, brands, and other details that can help outbreak investigators. Outbreak investigators only use your shopper records with your permission. <i>Context: We hear in outbreaks that people are often reluctant to give out shopper card info. This info helps tremendously during outbreaks, and we're looking to find a message that may convince people we won't/don't share their private info.</i>	Web message	-White, under 65 year olds... -H/L individuals -AA/Black individuals -Older adults 65+	ORPB PEA
Always take steps to prevent getting sick from raw frozen breaded stuffed chicken products. Some frozen breaded stuffed chicken products may look browned and cooked but are, in fact, raw. They have been linked to several outbreaks, including a 2015 Salmonella outbreak. Follow cooking instructions exactly as written on the label. Do not cook them	Message	-Lower income people -People who live in mobile-types of homes -Younger adults (18-29 years)	ORPB PEA

using a microwave, air fryer, or other methods not stated on the label; these methods do not always cook raw chicken products fully. • Use a food thermometer to check that the center of the chicken has reached 165°F, a temperature high enough to kill harmful bacteria. Color is not a reliable way to tell if the chicken is safe to eat. • Wash your hands before and after handling raw chicken products. Wash surfaces and containers that have touched raw chicken using hot soapy water or a dishwasher. <i>Context: Looking to find what people would do if they read this message. Survey data indicates certain groups of people more likely to not use ovens or use microwaves to prepare</i>			
Irradiation webpage	Web message/Infographic?		ORPB PEA

EDEB

Message/content(also add in if there is anything specific you would like to test—like focus on the colors etc).	What (SM/inforgraphic/message)	Audience (see audience list above)	POC/Branch
Making Chitlins? (cdc.gov) https://www.cdc.gov/ychs/programs/chitlins/			
Behavioral questions about: Asking people their behaviors about “pre-prepared” ▪ Frozen breaded stuffed chicken ▪ Frozen breaded not stuffed chicken ▪ Chicken nuggets - o What do they know about this? - o Is this something they are aware of being an issue?			Staci
Cronobacter and the preparation of infant formula - o What is the usual amount of time an infant can get a bottle of the formula after it’s prepared? - o Do people typically go beyond		Pregnant people	Staci

the time limit?			
o What are best practices?			
o How do people get this info?			