

On Jul 18, 2013, at 8:53 AM, "Buchholz, Annemarie" <Annemarie.Buchholz@fda.hhs.gov> wrote:

Dear Mr. Daniel Cohen,

Thank you for the questions regarding the QAR and the Analysis of Economic Impacts. I hope this response satisfies the questions in your emails to Carol D'lima and Katherine Vierk, as well as in the email Erick Snellman received via Samir Assar. ...

A copy of the complete set of outbreaks used in the analysis is also attached to this email for your use.

In regard to your question on the status of the QAR and the Economic Impact Analysis – The QAR posted is in draft form and currently undergoing peer-review. We are accepting any comment on it during the open comment period.

All the best,
Annemarie

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THIS FILE CONTAINS INFORMATION THAT IS SUBJECT TO CHANGE.

Last Update: 8/23/2011

Each year multiple illness outbreaks associated with FDA regulated products are reported. FDA, along with CDC and state and local health departments, collaborate to compile, track, and summarize data pertaining to outbreaks.

Outbreaks and illness are reported to CORE by FDA District Offices, State and Local Health Departments, and the CDC. Outbreaks are tracked if an FDA-regulated product is implicated in causing human illness. The information represents outbreaks and illnesses reported to FDA, and do not include illnesses that may have occurred but were not captured by the outbreak reporting process.

Prior to the start of CORE, the database only tracked outbreaks and illnesses associated with human foods and cosmetic products. Beginning in August 2011, CORE began also tracking animal food and feed outbreaks. Data on animal food/feed outbreaks prior to August 2011 should be requested from FDA's Center for Veterinary Medicine.

The following caveats are to be cited when providing data from the CORE Outbreak Database:

1. The outbreaks tracked by FDA are a subset of all the outbreaks tracked by CDC.
2. The data only represent those outbreaks and illnesses in which the outbreak investigation demonstrated an association with FDA-regulated foods and cosmetics (i.e., foods that enter or are destined for inter-state commerce that are under FDA's regulatory authority).
3. Outbreak and illness data represent only the number of illnesses reported to CDC, FDA, and state, local or territorial health departments in association with an outbreak due to FDA-regulated foods. The data do not include illnesses that may have occurred but were not reported to FDA, sporadic cases of illness, illnesses not associated with a food vehicle, and illnesses transmitted person-to-person.
4. The data do not contain information on the large number of outbreaks/illnesses reported to CDC in which the contaminated food cannot be determined or where the point of contamination is determined to be the home, retail setting or institutional setting outside the scope of federal regulatory agencies.
5. Due to lags in reporting of illnesses, some differences in numerical tallies may exist between FDA and CDC data.
6. The data do not include sporadic *Vibrio* infections.

Year	Vehicle	Fresh-cut?	Vehicle category	Vehicle type	Agent	Agent Type	Cases	Hosp.	Deaths	Origin by country/state	Origin by category
1996	raspberries		produce	berries	<i>Cyclospora</i>	parasite	1465			Guatemala	Imported
1996	mesclun lettuce		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	61			Peru, AZ	Unknown
1996	mesclun lettuce (susp.)		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	7				Unknown
1996	Alfalfa sprouts		sprouts		<i>Salmonella</i> Montevideo	bacterial	550				Unknown
1996	Clover sprouts		sprouts		<i>Salmonella</i> Meleagridis	bacterial	100				Unknown
1997	raspberries		produce	berries	<i>Cyclospora</i>	parasite	1012			Guatemala	Imported
1997	basil		produce	herb	<i>Cyclospora</i>	parasite	341				Unknown
1997	mesclun lettuce		produce	leafy greens	<i>Cyclospora</i>	parasite	12			Peru	Imported
1997	cantaloupe		produce	melon	<i>Salmonella</i> Saphra	bacterial	24	6	0	Mexico	Imported
1997	Alfalfa & clover sprouts		sprouts		<i>Salmonella</i> Seftenberg	bacterial	60				Unknown
1997	Alfalfa & other sprouts		sprouts		<i>Salmonella</i> Infantis / <i>Salmonella</i> Anatum	bacterial	109				Unknown
1997	Alfalfa sprouts		sprouts		<i>E. Coli</i> O157:H7	bacterial	108				Unknown
1998	green onions		produce	green onion	Hepatitis A	viral	42	13	0	inconclusive (FL or MX)	Unknown
1998	parsley		produce	herb	<i>Shigella</i> sonnei	bacterial	486	NR	NR	Mexico	Imported
1998	lettuce		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	2	NR	NR		Unknown
1998	lettuce		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	4	NR	NR		Unknown
1998	cantaloupe		produce	melon	<i>Salmonella</i> Oranienberg	bacterial	22	3	1		Unknown
1998	tomatoes		produce	tomato	<i>Salmonella</i> Baildon	bacterial	86	16	3	FL	Domestic
1998	Alfalfa & clover sprouts		sprouts		<i>E. Coli</i> O157 NM	bacterial	8	2	0		Unknown
1998	Alfalfa sprouts		sprouts		<i>Salmonella</i> Cubana / <i>Salmonella</i> Havana	bacterial	40	NR	NR		Unknown
1999	berries (susp.)		produce	berries	<i>Cyclospora</i>	parasite	94	1	NR		Unknown
1999	basil		produce	herb	<i>Cyclospora</i>	parasite	62	1	0	Mexico	Imported
1999	romaine lettuce		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	45	0	0	CA	Domestic
1999	romaine lettuce hearts		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	3	NR	NR	CA	Domestic
1999	cabbage (coleslaw)		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	18	11	NR	NC or VA	Domestic
1999	lettuce		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	6	NR	NR		Unknown
1999	lettuce (unspecified)		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	47	23	0		Unknown
1999	romaine lettuce		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	14	6	0		Unknown
1999	mango		produce	other	<i>Salmonella</i> Newport	bacterial	78	15	0	Brazil	Imported
1999	Alfalfa sprouts		sprouts		<i>Salmonella</i> Mbandaka	bacterial	83	9	0		Unknown
1999	Alfalfa sprouts		sprouts		<i>Salmonella</i> Muenchen	bacterial	38	6	0		Unknown
1999	Alfalfa sprouts		sprouts		<i>Salmonella</i> Muenchen	bacterial	61	6	0		Unknown
1999	Alfalfa sprouts		sprouts		<i>Salmonella</i> spp.	bacterial	34	NR	NR		Unknown
1999	Clover & alfalfa sprouts		sprouts		<i>Salmonella</i> Typhimurium	bacterial	112	3	0		Unknown
1999	Clover sprouts		sprouts		<i>Salmonella</i> Saintpaul	bacterial	36	2	0		Unknown
2000	berries (susp.)		produce	berries	<i>Cyclospora</i>	parasite	19	0	0	Guatemala, Chile	Imported
2000	raspberries		produce	berries	<i>Cyclospora</i>	parasite	54	3	0	inconclusive (CA, MX, Guat.)	Unknown
2000	green onions (susp.)		produce	green onion	Hepatitis A	viral	32	15	0	Mexico	Imported
2000	cantaloupe		produce	melon	<i>Salmonella</i> Poona	bacterial	46	11	0	Mexico	Imported
2000	tomatoes		produce	tomato	<i>Salmonella</i> Thompson	bacterial	43	NR	NR	FL or GA	Domestic
2000	Mung bean sprouts		sprouts		<i>Salmonella</i> Enteritidis	bacterial	75	3	NR		Unknown
2001	raspberries		produce	berries	<i>Cyclospora</i>	parasite	26	0	0	Chile	Imported
2001	arugula (susp.)		produce	leafy greens	<i>Cyclospora</i>	parasite	3	NR	NR		Unknown
2001	cantaloupe		produce	melon	<i>Salmonella</i> Anatum	bacterial	15	NR	NR	Mexico	Imported
2001	cantaloupe		produce	melon	<i>Salmonella</i> Poona	bacterial	50	9	2	Mexico	Imported
2001	almonds		produce	nut	<i>Salmonella</i> Enteritidis	bacterial	168	NR	0	CA	Domestic
2001	green grapes		produce	other	<i>Salmonella</i> Seftenberg	bacterial	40	3	NR	CA	Domestic
2001	mango		produce	other	<i>Salmonella</i> Saintpaul	bacterial	26	1	0		Unknown
2001	unknown fresh produce		produce	unknown	<i>Cyclospora</i>	parasite	39	6	NR		Unknown
2001	Alfalfa sprouts		sprouts		<i>Salmonella</i> Kottbus	bacterial	32	3	NR		Unknown
2001	Mung bean sprouts		sprouts		<i>Salmonella</i> Enteritidis	bacterial	21	0	0		Unknown
2001	Mung bean sprouts		sprouts		<i>Salmonella</i> Enteritidis	bacterial	35	2	NR		Unknown
2002	iceberg lettuce	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	16	5	0	CA	Domestic
2002	romaine lettuce	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	55	NR	0	CA	Domestic

* Outbreaks associated with FDA regulated products only

NR = Not reported

susp = Suspected

Year	Vehicle	Fresh-cut?	Vehicle category	Vehicle type	Agent	Agent Type	Cases	Hosp.	Deaths	Origin by country/state	Origin by category
2002	cantaloupe		produce	melon	<i>Salmonella</i> Poona	bacterial	26	10	0	Mexico	Imported
2002	roma tomatoes	Y	produce	tomato	<i>Salmonella</i> Javiana	bacterial	159	3	0	inconclusive (MX or FL)	Unknown
2002	red round tomatoes		produce	tomato	<i>Salmonella</i> Newport	bacterial	510	NR	NR	VA	Domestic
2002	grape tomatoes		produce	tomato	<i>Salmonella</i> Newport	bacterial	7	3	0	inconclusive (MX or FL)	Unknown
2002	Alfalfa sprouts		sprouts		<i>E. Coli</i> O157:H7	bacterial	5	3	0	CA	Domestic
2002	Mung bean sprouts		sprouts		<i>Salmonella</i> Enteritidis	bacterial	15	1	NR	China	Imported
2003	green onions		produce	green onion	Hepatitis A	viral	919	128	3	Mexico	Imported
2003	lettuce mix w/romaine	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	9	1	0	CA	Domestic
2003	precut lettuce	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	51	11	0	CA	Domestic
2003	precut spinach	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	16	10	1	CA	Domestic
2003	precut melons	Y	produce	melon	<i>Salmonella</i> Muenchen	bacterial	58	15	NR		Unknown
2003	honeydew melons		produce	melon	Shigella sonnei	bacterial	56	3	0	CA	Domestic
2003	honeydew melons		produce	melon	<i>Salmonella</i> Newport	bacterial	68	13	2		Unknown
2003	Alfalfa sprouts		sprouts		<i>Salmonella</i> Chester / <i>Salmonella</i> Sandiego	bacterial	26	3	1	WA	Domestic
2003	Alfalfa sprouts		sprouts		<i>Salmonella</i> Saintpaul	bacterial	16	0	0	WA	Domestic
2003	Alfalfa sprouts		sprouts		<i>E. Coli</i> O157 NM	bacterial	13	1	0	Australia	Imported
2003	Alfalfa sprouts		sprouts		<i>E. Coli</i> O157:H7	bacterial	20	3	0	Australia	Imported
2003	Alfalfa sprouts		sprouts		<i>E. Coli</i> O157:H7	bacterial	7	2	0		Unknown
2004	lettuce	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	6	4	0	CA	Domestic
2004	lettuce	Y	produce	leafy greens	<i>Salmonella</i> Newport	bacterial	97	1	0		Unknown
2004	cantaloupe (susp.)		produce	melon	<i>Salmonella</i> Oranienburg	bacterial	25	0	0		Unknown
2004	basil or mesclun lettuce		produce	multiple	<i>Cyclospora</i>	parasite	56	0	0		Unknown
2004	mesclun lettuce or basil		produce	multiple	<i>Cyclospora</i>	parasite	38	NR	0		Unknown
2004	raw almonds		produce	nut	<i>Salmonella</i> Enteritidis	bacterial	42	10	1	CA	Domestic
2004	squash		produce	other	Cucurbitacin toxin	toxin	8	0	0	WA	Domestic
2004	snow peas		produce	other	<i>Cyclospora</i>	parasite	116	0	0	Guatemala	Imported
2004	roma tomatoes	Y	produce	tomato	<i>Salmonella</i> Javiana, <i>Salmonella</i> Anatum, <i>Salmonella</i> Thompson, <i>Salmonella</i> Typhimurium	bacterial	429	129	0	FL, GA or SC	Domestic
2004	roma tomatoes		produce	tomato	<i>Salmonella</i> Braenderup	bacterial	137	25	0	FL	Domestic
2004	Alfalfa sprouts		sprouts		<i>E. Coli</i> O157 NM	bacterial	2	0	0	Australia	Imported
2004	Alfalfa sprouts		sprouts		<i>Salmonella</i> Bovismorbificans	bacterial	35	5	NR	Australia	Imported
2005	parsley		produce	herb	<i>E. Coli</i> O157:H7	bacterial	108	8	0	OR	Domestic
2005	basil		produce	herb	<i>Cyclospora</i>	parasite	592	0	0	Peru	Imported
2005	basil		produce	herb	<i>Cyclospora</i>	parasite	30	1	0		Unknown
2005	pre-packaged salad	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	34	12	NR	CA	Domestic
2005	tomatoes	Y	produce	tomato	<i>Salmonella</i> Enteritidis	bacterial	85	7	0	CA	Domestic
2005	diced roma tomatoes	Y	produce	tomato	<i>Salmonella</i> Braenderup	bacterial	84	8	0	FL or VA	Domestic
2005	red round tomatoes	Y	produce	tomato	<i>Salmonella</i> Newport	bacterial	52	8	0	VA	Domestic
2006	lettuce	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	77	55	0	CA	Domestic
2006	lettuce	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	80	23	0	CA	Domestic
2006	spinach	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	238	103	5	CA	Domestic
2006	honeydew/cantaloupe	Y	produce	melon	<i>Salmonella</i> Oranienburg	bacterial	41	7	0	Canada	Imported
2006	red round tomatoes		produce	tomato	<i>Salmonella</i> Typhimurium	bacterial	192	24	0	OH	Domestic
2006	red round tomatoes		produce	tomato	<i>Salmonella</i> Newport	bacterial	115	8	0	VA	Domestic
2007	red round tomatoes (susp.)		produce	tomato	<i>Salmonella</i> Newport	bacterial	65	11	0	VA	Domestic
2008	Raspberries/blackberries		produce	berries	<i>Cyclospora</i>	parasite	59	2	0		Unknown
2008	Romaine lettuce	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	10	5	0	OR or WA	Domestic
2008	Organic spinach	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	13	0	0	WA	Domestic
2008	Shredded iceberg lettuce	Y	produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	74	NR	0		Unknown
2008	Romaine lettuce (susp)		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	7	0	0	CA	Domestic
2008	Cantaloupe (susp)		produce	melon	<i>Salmonella</i> Javiana	bacterial	10	NR	NR	AZ	Domestic
2008	Cantaloupe		produce	melon	<i>Salmonella</i> Litchfield	bacterial	53	17	0	Honduras	Imported
2008	Jalapeno/serrano peppers		produce	other	<i>Salmonella</i> Saintpaul	bacterial	1535	308	2	Mexico	Imported
2008	Tomatoes (susp)		produce	tomato	<i>Salmonella</i> Enteritidis	bacterial	61	NR	NR		Unknown

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NR = Not reported

susp = Suspected

Year	Vehicle	Fresh-cut?	Vehicle category	Vehicle type	Agent	Agent Type	Cases	Hosp.	Deaths	Origin by country/state	Origin by category
2008	Alfalfa sprouts		sprouts		<i>Salmonella</i> Typhimurium	bacterial	24	NR	NR	WA	Domestic
2008	Alfalfa sprouts (susp)		sprouts		<i>E. coli</i> O157:H7	bacterial	21	2	0	CO	Domestic
2009	Berries		produce	berries	<i>Salmonella</i> Muenchen	bacterial	12	5	0	FL	Domestic
2009	Berries		produce	berries	<i>Cyclospora</i>	parasite	7	1	0		Unknown
2009	Lettuce (susp.)		produce	leafy greens	<i>E. Coli</i> O157:H7	bacterial	20	3	0		Unknown
2009	Melons		produce	melon	<i>Salmonella</i> Carrau	bacterial	52	4	1		Unknown
2009	Cucumber (susp.)		produce	other	<i>Salmonella</i> Typhimurium	bacterial	118	NR	NR		Unknown
2009	Round tomatoes		produce	tomato	<i>Salmonella</i> Oranienburg	bacterial	79	0	0	FL	Domestic
2009	Alfalfa Sprouts		sprouts		<i>Salmonella</i> Oranienburg	bacterial	23	0	0	AZ	Domestic
2009	Alfalfa Sprouts		sprouts		<i>Salmonella</i> Saintpaul	bacterial	235	25	0		Unknown
2009	Alfalfa Sprouts (susp.)		sprouts		<i>Salmonella</i> Typhimurium	bacterial	15	2	0		Unknown
2010	Blueberries		produce	berries	<i>Salmonella</i> Newport	bacterial	5	0	0	MI	Domestic
2010	Bagged romaine salads (susp)	Y	produce	leafy greens	<i>Salmonella</i> Saintpaul	bacterial	12	0	0		Unknown
2010	Romaine lettuce		produce	leafy greens	<i>E. Coli</i> Non-O157 STEC	bacterial	33	12	0	AZ	Domestic
2010	Celery		produce		<i>Salmonella</i> Hartford	bacterial	10	5	5	TX	Domestic
2010	Tomatoes		produce	tomato	<i>Salmonella</i> Newport	bacterial	49	4	0	FL	Domestic
2010	Tomatoes (susp)		produce	tomato	<i>Salmonella</i> Javiana	bacterial	46	0	0		Unknown
2010	Produce (susp)		produce	unknown	<i>Salmonella</i> Hartford	bacterial	75	15	0		Unknown
2010	Produce (susp)		produce	unknown	<i>Salmonella</i> Baildon	bacterial	80	27	0		Unknown
2010	Produce (susp)		produce	unknown	<i>Salmonella</i> Javiana	bacterial	276	14	0		Unknown
2010	Produce (susp)		produce	unknown	<i>Salmonella</i> Hvittingfoss	bacterial	97	26	0		Unknown
2010	Sprouts (susp)		sprouts		<i>Salmonella</i> 14 [5],12:i:	bacterial	140	34	0	IL	Domestic
2010	Sprouts		sprouts		<i>Salmonella</i> Newport	bacterial	42	6	0		Unknown
2010	Sprouts		sprouts		<i>Salmonella</i> Newport	bacterial	9	0	0		Unknown

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