



PROFILE: Preserved Fruits & Vegetables



Office of General Industry Enforcement

Industry Group 203 – PRESERVED FRUITS & VEGETABLES

Process Description

The canned products of this industry group – SIC's 2032, 2033, 2034, 2035, 2037, and 2038 – are distinguished by their processing rather than by the container. The products may be shipped in bulk or in individual cans, bottles, retort pouch packages, or other containers.

Food processing occupies a powerful position within the food and fiber system. The industry has been likened to the center of an hourglass: raw agricultural commodities from more than two million farms and ranches flow through roughly 20,000 processors, which in turn sell their array of processed products to more than half a million food wholesalers and retailers. Over a hundred million domestic households consume the meat and dairy products, canned and frozen fruits and vegetables, milled grains, bakery products, beverages, and seafood.

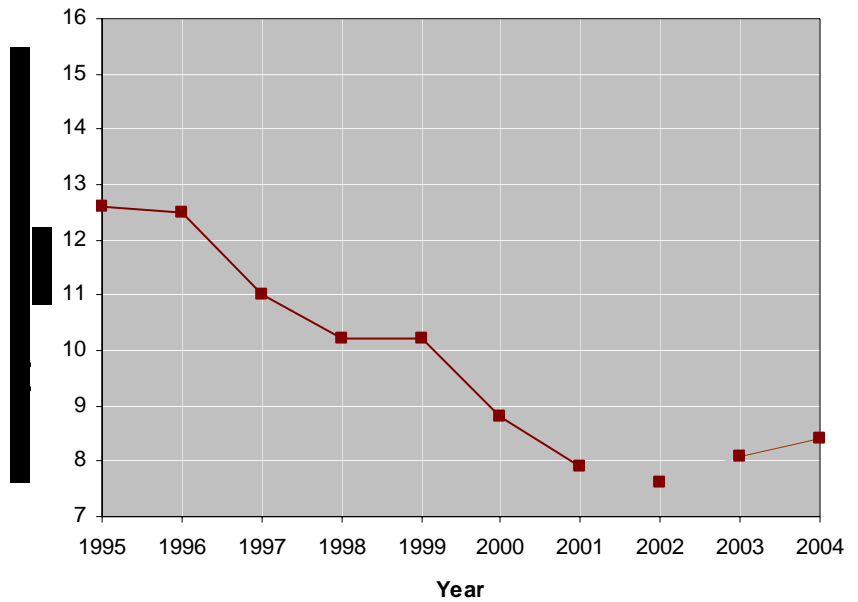
The importance of food processing lies in its various economic functions. Foremost, processors convert food materials into finished, consumer-ready products using labor, machinery, energy, and management. They employ handling, manufacturing, and packaging techniques to add economic value to raw commodities harvested from the farm or the sea. Virtually all agricultural products are processed to some degree before reaching consumers. The value added varies by commodity: steers become meat, potatoes are turned into French fries, wheat is made into flour, apples become juice or sauce, and fresh salmon emerges as canned salmon. The farm value of fruit and vegetable products at the retail level—frozen peas, for instance—is about 20 percent. Thus, 80 percent of the retail value is "added" to the raw product during processing and distribution.

Processors serve as middlemen within the food system. Consumer demand and agricultural supply information come together at the food processing center. For instance, a tight supply of frozen corn at the retail level is eventually translated into higher processor prices, a greater willingness to pay for key inputs, and a price signal to farmers to expand production or sell off their stored crop. In contrast, an unexpectedly short crop induces processors to raise their prices to retailers and distributors, which subsequently prompts a decrease in consumer demand.

Source: Standard Industrial Classification Manual 1987; Washington State Labor Market, 2003

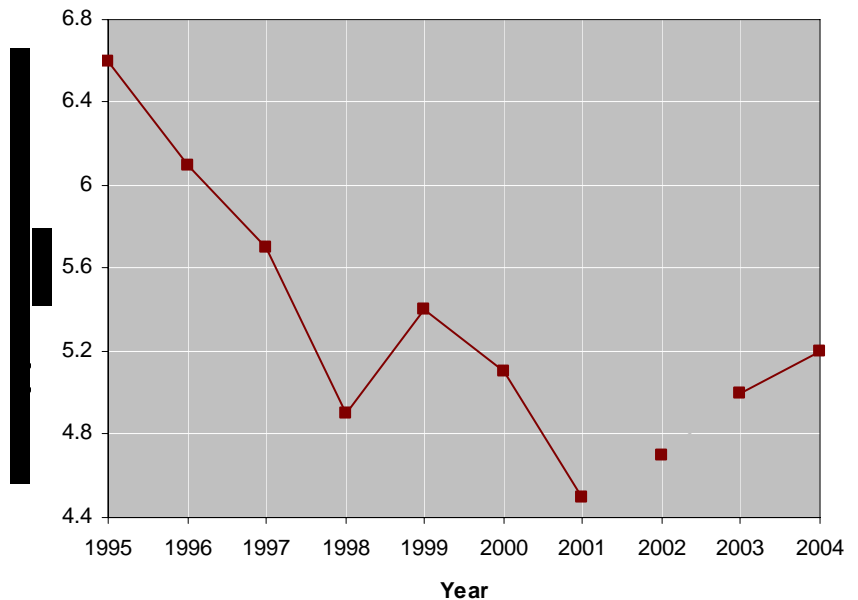
BLS Profile Total Recordable Case Rate (Industry Group 203)

Year	Annual
1995	12.6
1996	12.5
1997	11.0
1998	10.2
1999	10.2
2000	8.8
2001	7.9
2002	7.6*
2003	8.1**
2004	8.4



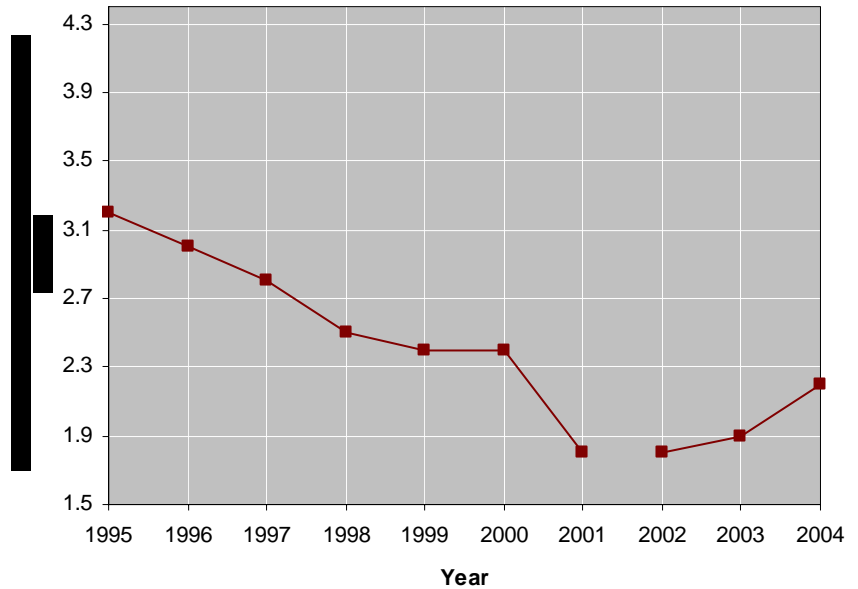
Lost Workday Case Rate (Industry Group 203)

Year	Annual
1995	6.6
1996	6.1
1997	5.7
1998	4.9
1999	5.4
2000	5.1
2001	4.5
2002	4.7*
2003	5.0**
2004	5.2



Cases with Days Away Rate (Industry Group – 203)

Year	Annual
1995	3.2
1996	3.0
1997	2.8
1998	2.5
1999	2.4
2000	2.4
2001	1.8
2002	1.8*
2003	1.9**
2004	2.2



Total Fatalities for NAICS Group 3114 (2004): 5

Source: Bureau of Labor Statistics (National Data)

* Effective January 1, 2002, the Occupational Safety and Health Administration (OSHA) revised its requirements for reporting occupational injuries and illnesses. Due to the revised recordkeeping rule, the estimates from the 2002 survey are not comparable with those from previous years, thus resulting in the discontinuous graph lines.

** Beginning with the 2003 reference year, the BLS Survey of Occupational Injuries and Illnesses began using the 2000 North American Industry Classification System (NAICS). Prior to 2003, the survey used the Standard Industrial Classification (SIC) system. The substantial differences between these systems result in breaks in series for industry data. This data is not reflected on the accompanying chart.

National Summary by Region

NAICS 3114

Regions	Establishments with 10 or more employees		Establishments with 9 or fewer employees	
	Establishments	Employees	Establishments	Employees
1	58	4789	80	246
2	135	14521	171	479
3	82	9825	80	190
4	110	11982	229	582
5	245	24770	209	576
6	139	16109	229	628
7	43	5951	90	215
8	30	2142	90	252
9	N/A	N/A	N/A	N/A
10	33	8461	23	68

NA = Data not available

Establishment and employment counts come from Dun & Bradstreet, March 2006.

Average Case and Demographic Characteristics

Average cases per year, 1995 – 2000		6178
Demographics of worker	Sex	59.7% men
		29.2% ages 25-34 25.2% ages 35-44 21.0% ages 20-24
	Length of service with employer	29.4% more than 5 years 27.9% 1-5 years 25.9% less than 1 year
	Race/ethnic origin	44.7% white non-Hispanic 29.6% Hispanic - any race 7.2% black not-Hispanic
Characteristics of injury/illness	Days away from work	49.8% 1-5 days 31.3% 6-30 days 19.0% 31 or more days
	Nature of injury/illness	36.3% sprains/strains 18.0% "all other" natures 10.8% bruises/contusions
	Part of body affected	27.1% arms/wrists/hands/fingers 20.4% legs/knees/feet/toes 20.4% back
	Source of injury/illness	19.6% containers 18.3% floors/ground surfaces 17.4% worker motion/position 12.5% machinery 12.4% "all other" sources
	Event or exposure	19.4% overexertion 13.9% fall on same level 11.6% "all other" events/exposure 10.4% struck by object

Source: OSHA Office of Statistical Analysis compilation of BLS data.

Note: The percentages on this table do not sum to 100%. Only the most frequently coded characteristics are listed. The "All Other" category should not be interpreted as being all inclusive of the categories not listed above.

Inspection Summary

FY 2005 Federal OSHA Inspection Data Industry Group 203

Federal Data Only	I	II	III	IV	V	VI	VII	VIII	IX	X	Total
Total Inspections	5	11	7	13	64	5	4	0	0	1	110
Records Insp.	0	0	1	0	0	1	0	0	0	0	2
Safety	2	6	3	4	53	2	2	0	0	0	72
Health	3	5	4	9	11	3	2	0	0	1	38
Inspections by Type											
Unprogrammed	3	3	1	4	13	1	4	0	0	1	30
Accidents	0	0	0	1	1	0	0	0	0	0	2
Complaints	3	2	1	0	7	0	4	0	0	0	17
Referrals	0	1	0	3	3	1	0	0	0	1	9
Monitoring	0	0	0	0	1	0	0	0	0	0	1
Variance	0	0	0	0	0	0	0	0	0	0	0
Follow-Up	0	0	0	0	1	0	0	0	0	0	1
Unprog. Related	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Programmed	2	8	6	9	51	4	0	0	0	0	80
Planned	2	8	6	9	50	4	0	0	0	0	79
Prog. Related	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	1	0	0	0	0	0	1

Source: IMIS Database

Top 10 Violations Cited

Standard	#Cited	#Insp	Description
1910.219	53	25	Mechanical Power – Transmission Apparatus
1910.147	52	29	The Control of Hazardous Energy, Lockout/Tagout
1910.212	44	32	Machines, General Requirements
1910.305	35	23	Electrical, Wiring Methods, Components & Equipment
1910.1200	32	19	Hazard Communication
1910.23	31	23	Guarding Floor & Wall Openings & Holes
1910.146	31	11	Permit-Required Confined Spaces
1910.303	30	22	Electrical Systems Design, General Requirements
1910.178	29	21	Powered Industrial Trucks
1910.132	22	15	Personal Protective Equipment, General Requirements

Source: IMIS Database – FY 2005 (Federal Only)

Average Number of Employees Per Establishment: 49
Percent small establishments: 57.9%

Some Potential Hazards and Their Sources

Hazard	Source
Struck by falling objects	Docks – Heavy boxes falling from lift trucks.
Caught in point of operation	Conveyors
Slip, trip and falls	Water from floating System
Struck by flying objects	Box staple machines
Contact with toxic or noxious substances	CO released from lift trucks
Noise	Conveyors and other machinery

2003 BLS Industry Data for Industry Group 203 – PRESERVED FRUITS AND VEGETABLES

All Reported Cases 3420

Nature of Illness or Injury	Number	% Total
Sprains, Strains	1130	33.0
Fractures	210	6.1
Cuts, Punctures	230	6.7
Bruises	440	12.9
Heat Burns	140	4.1
Chemical Burns	180	5.3
Amputations	80	2.3
Carpal Tunnel	60	1.8
Tendonitis	30	0.9
Mult Trauma Total	170	5.0
Mult Trauma with Fracture	60	1.8
Mult Trauma with Sprain	60	1.8
Back Pain Total	190	5.6
Back Pain Hurt Back Only	80	2.3
All Other	570	16.7

Part of Body Affected	Number	% Total
Head Total	430	12.6
Eyes	270	7.9
Neck	40	1.2
Trunk Total	1040	30.4
Trunk Back	610	17.8
Trunk Shoulder	160	4.7
Upper Extremities Total	970	28.4
Upper Extremities Finger	300	8.8
Upper Extremities Hand	230	6.7
Upper Extremities Wrist	180	5.3
Lower Extremities Total	550	16.1
Lower Extremities Knee	180	5.3
Lower Extremities Foot Toe	100	2.9
Body Systems	N/A	N/A
Multiple Body Parts	340	9.9
All Other Body Parts	40	1.2

Source of Injury or Illness	Number	% Total
Chem and Chem Products	220	6.4
Containers	530	15.5
Furniture and Fixtures	30	0.9
Machinery	460	13.5
Parts and Materials	210	6.1
Worker Motion	620	18.1
Floors Walkways	610	17.8
Handtools	90	2.6
Vehicle	160	4.7

Health Care Patient	N/A	N/A
All Other Sources	480	14.0

Sex	Number	% Total
Men	2210	64.6
Women	1220	35.7
Sex Not Reported	N/A	N/A

Age	Number	% Total
Under 14	N/A	N/A
14 to 15	N/A	N/A
16 to 19	70	2.0
20 to 24	310	9.1
25 to 34	570	16.7
35 to 44	880	25.7
45 to 54	930	27.2
55 to 64	580	17.0
65 and Over	80	2.3
Not Reported	N/A	N/A

Race	Number	% Total
White	1180	34.5
Black	130	3.8
Asian	50	1.5
American Indian or Alaskan Native	N/A	N/A
Native Hawaiian or other Pacific Islander	N/A	N/A
Hispanic or Latino and Others	N/A	N/A
Multirace	N/A	N/A
Not Reported	550	16.1

Length of Service	Number	% Total
Less than 3 Months	440	12.9
3 to 11 Months	420	12.3
1 to 5 years	1070	31.3
More than 5 Years	1490	43.6
Service Not Reported	N/A	N/A

Days away from work	Number	% Total
1 Day	400	11.7
2 Days	290	8.5
3 to 5 Days	480	14.0
6 to 10 Days	530	15.5
11 to 20 Days	550	16.1
21 to 30 Days	330	9.6
31 Days or More	850	24.9
Median Days Away	11	N/A

Event/Exposure Leading to Injury	Number	% Total
Total Contact with Objects	1000	29.2
Struck by Object	320	9.4
Struck Against Object	270	7.9
Caught in Object	330	9.6

Fall to Lower Level	170	5.0
Fall on Same Level	540	15.8
Slips or Trips	110	3.2
Overexertion Total	570	16.7
Overexertion in Lifting	300	8.8
Repetitive Motion	190	5.6
Exposure to Harmful Substance	380	11.1
Transportation Accidents	90	2.6
Fires and Explosions	N/A	N/A
Total Assaults – Violent Acts	N/A	N/A
Assaults by Person	N/A	N/A
All Other Assaults	N/A	N/A
All Other Events	N/A	N/A

Photo Credit:

Beau Ellis, Takoma Park, MD.