
1998

Summary of U.S. Occupational Injuries, Illnesses, and Fatalities in the Petroleum Industry

**As Reported to the
American Petroleum Institute**

**Covering U.S. Petroleum and Petrochemical
Operations of Reporting Companies for 1998**

API Publication 2377
April 1999



One of the most significant long-term trends affecting the future vitality of the petroleum industry is the public's concerns about the environment. Recognizing this trend, API member companies have developed a positive, forward looking strategy called STEP: Strategies for Today's Environmental Partnership. This program aims to address public concerns by improving industry's environmental, health and safety performance; documenting performance improvements; and communicating them to the public. The foundation of STEP is the API Environmental Mission and Guiding Environmental Principles. API standards, by promoting the use of sound engineering and operational practices, are an important means of implementing API's STEP program.

API ENVIRONMENTAL MISSION AND GUIDING ENVIRONMENTAL PRINCIPLES

The members of the American Petroleum Institute are dedicated to continuous efforts to improve the compatibility of our operations with the environment while economically developing energy resources and supplying high quality products and services to consumers. The members recognize the importance of efficiently meeting society's needs and our responsibility to work with the public, the government, and others to develop and to use natural resources in an environmentally sound manner while protecting the health and safety of our employees and the public. To meet these responsibilities, API members pledge to manage our businesses according to these principles:

- To recognize and to respond to community concerns about our raw materials, products and operations.
- To operate our plants and facilities, and to handle our raw materials and products in a manner that protects the environment, and the safety and health of our employees and the public.
- To make safety, health and environmental considerations a priority in our planning, and our development of new products and processes.
- To advise promptly appropriate officials, employees, customers and the public of information on significant industry-related safety, health and environmental hazards, and to recommend protective measures.
- To counsel customers, transporters and others in the safe use, transportation and disposal of our raw materials, products and waste materials.
- To economically develop and produce natural resources and to conserve those resources by using energy efficiently.
- To extend knowledge by conducting our supporting research on the safety, health and environmental effects of our raw materials, products, processes and waste materials.
- To commit to reduce overall emissions and waste generation.
- To work with others to resolve problems created by handling and disposal of hazardous substances from our operations.
- To participate with government and others in creating responsible laws, regulations and standards to safeguard the community, workplace and environment.
- To promote these principles and practices by sharing experiences and offering assistance to others who produce, handle, use, transport or dispose of similar raw materials, petroleum products and wastes.

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**Prepared for the Regulatory Affairs Department
by the Statistics Department**

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April 1999

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REPORTED U.S. OCCUPATIONAL INJURIES, ILLNESSES, AND FATALITIES IN THE PETROLEUM INDUSTRY: 1998

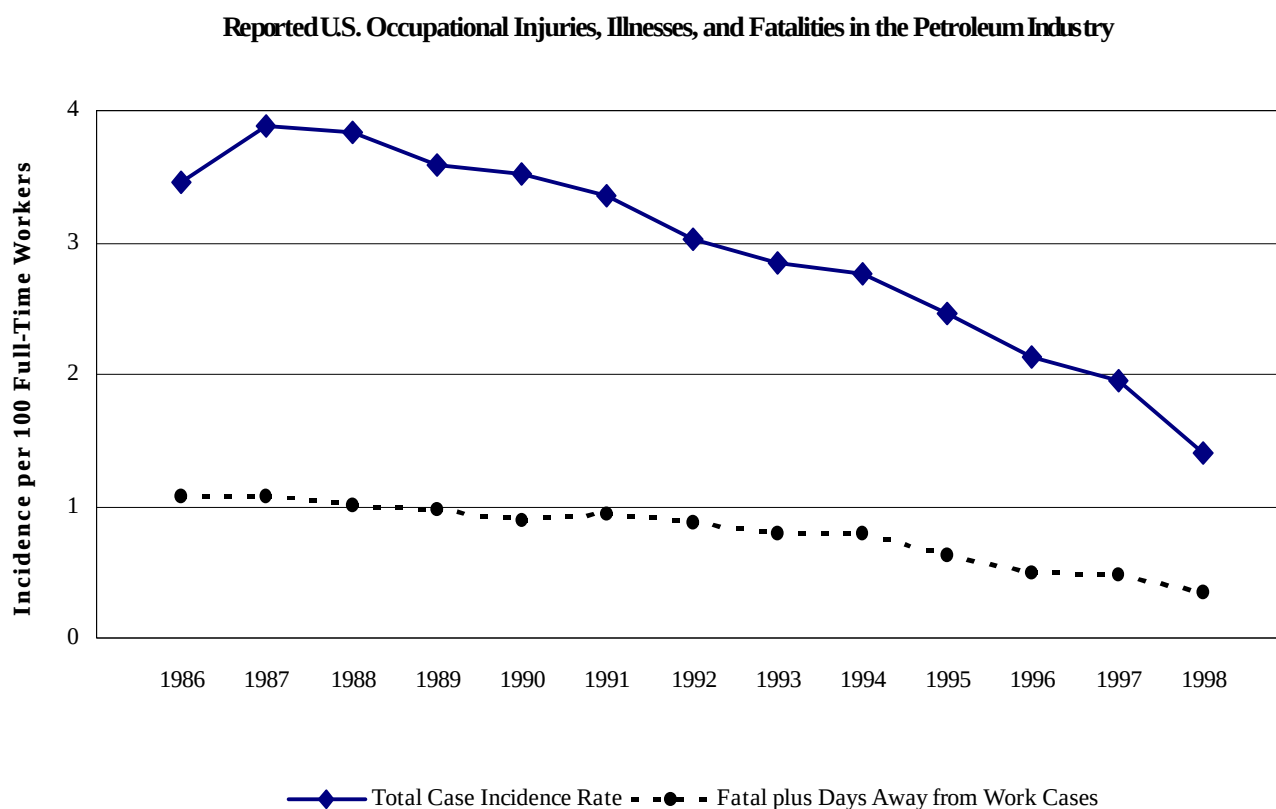
SUMMARY

This report is an aggregate of data submitted to the American Petroleum Institute (API) by 118 oil and gas companies (including 14 subsidiaries), employing 212,850 persons with a total work experience of 435 million hours during 1998. In 1997, 139 companies reported 231,332 employees with a work experience of 470 million hours.

In 1998, the *Total Case Incidence Rate* reported was 1.34, compared to 1.95 for 1997. This rate is the number of total recordable cases per 200,000 hours worked, or approximately the number of cases per 100 full-time workers per year.

The *Fatal Plus Days Away From Work Incidence Rate* reported for 1998 was .33 per 200,000 hours worked—or one case for every 303 employees, improving from .48 for 1997—or one case for every 208 employees.

Safety among reporting companies continues to improve, as shown in the figure below. Since 1986, the reported *Total Case Incidence Rate* and *Fatal plus Days Away from Work Incidence Rate* have improved an average of 4.6 and 7.9 percent per year, respectively.



The Survey

Participation in the API annual survey is voluntary and company participation varies from year to year. Therefore, caution should be exercised when using this data to characterize the performance of the industry as a whole. However, 84 companies that responded to this year's survey also responded to last year's survey. These 84 companies represent 86 percent of the total number of employees and 86 percent of the total number of hours reported to API for 1998. Participants were asked to submit data according to the Bureau of Labor Statistics (BLS) Recordkeeping Guidelines for Occupational Injuries and Illnesses, September 1986 edition. Therefore, this report provides incidence rates per 200,000 hours worked on the same basis as those reported by BLS. It should be noted, however, that this report covers *company employees* only; contract worker safety statistics are not included.

Of the 118 companies that responded to the survey 86 agreed to have their company data published individually. However, the total listed for each function is the total for *all* 118 reporting companies.

Significant differences exist among companies regarding return-to-work policies and practices, i.e., for returning injured or ill employees to restricted activity if they are unable to perform normal job activities and as part of their recoveries. Therefore, use of the *Fatal plus Days Away From Work Incidence Rates alone* to judge and compare company safety performance is not recommended.

The Bureau of Labor Statistics (BLS) publishes employment figures for different sectors of the petroleum industry. The following table shows the number of full-time employees given in this API report and the comparative total employment figures published by BLS. These figures can be used to calculate the API survey representation rate.

Caution should be used, however, when interpreting these representation rates. As mentioned above, the API survey is limited to *company employees* only while the BLS has a more inclusive definition of employment (the BLS includes contract workers).

Employment in the Petroleum Industry				
	E&P and Drilling	Refining and Gas Processing	Oil Pipelines	Total Marketing
BLS	325.9	92.8	14.2	831.5
API	38.8	55.3	10.5	49.1
API Representation Rate	12%	60%	74%	6%

Employment figures are in thousands. 1998 BLS figures are current as of March 1999.

Additional copies of this report may be obtained by contacting the API Publications and Distribution Department at (202) 682-8375.

This publication is also available on API's electronic bulletin board, ACCESS*API. For subscription information call (202) 682-8511.

U.S. Occupational Injuries and Illnesses for 1998

Covering Petroleum and Petrochemical Operations of Reporting Companies

Table 1 -- Company Totals (Including Offshore Activities)

1 Function	Key ⁶	2 Average Number of Employees	3 Hours Worked (Thousands)	4 Recordable Cases			5 Extent and Outcome of Injury and Illness						6 Incidence Rates		
				a	b	c	d	e	f	g	h	i	j	k	l
				Injuries	Illnesses	Total	Fatalities	Lost Workday Cases				Non-Fatal Cases Without Lost Workdays	Total Cases	Fatal plus Days Away From Work Cases	Lost Work Days -- Days Away From Work
								Cases Involving Days From Away Work Plus Days of Restricted Activity	Cases Involving Days Away From Work	Number of Days Away From Work	Number of Days of Restricted Activity				
Exploration	a	1,325	2,566	1	0	1	0	1	1	5	0	0	0.08	0.08	0.39
Production	b	7,312	15,557	85	3	88	0	43	12	245	399	45	1.13	0.15	3.15
E&P-Not sep ¹	ab	29,287	59,938	243	23	266	0	101	83	1,853	526	165	0.89	0.28	6.18
E&P Subtotal		37,924	78,061	329	26	355	0	145	96	2,103	925	210	0.91	0.25	5.39
Gas Processing	c	6,326	12,588	84	1	85	0	35	26	371	179	50	1.35	0.41	5.89
Drilling	d	924	1,857	40	0	40	1	19	19	826	0	20	4.31	2.15	88.96
Petrochemical Mfg.	e	15,672	32,867	193	8	201	1	98	25	510	1,421	102	1.22	0.16	3.10
Refining	f	49,002	102,956	927	56	983	5	482	170	3,466	5,379	496	1.91	0.34	6.73
Marketing-Whole.	g	10,296	21,605	214	5	219	2	145	59	1,083	1,018	72	2.03	0.56	10.03
Marketing-Retail	h	26,415	48,859	389	10	399	1	234	128	3,505	1,484	164	1.63	0.53	14.35
Mrkt-Not sep ²	gh	12,343	25,449	122	12	134	0	47	36	901	80	87	1.05	0.28	7.08
Mrkt. Subtotal		49,054	95,913	725	27	752	3	426	223	5,489	2,582	323	1.57	0.47	11.45
Pipeline-Liquid	i	10,479	21,845	152	19	171	0	71	55	1,057	840	100	1.57	0.50	9.68
Pipeline-Gas	j	270	516	7	0	7	0	3	3	108	100	4	2.71	1.16	41.86
Pipeline-Not sep ³	ij	1,713	3,638	22	4	26	0	13	6	132	131	13	1.43	0.33	7.26
Pipeline Subtotal		12,462	25,999	181	23	204	0	87	64	1,297	1,071	117	1.57	0.49	9.98
Marine-Tanker	k	223	662	12	1	13	0	7	0	0	34	6	3.93	0.00	0.00
Marine-Inland	l	230	835	3	0	3	0	3	1	14	2	0	0.72	0.24	3.35
Marine-Not sep ⁴	kl	1,799	4,306	62	1	63	1	30	22	1,172	179	32	2.93	1.07	54.44
Marine Subtotal		2,252	5,803	77	2	79	1	40	23	1,186	215	38	2.72	0.83	40.88
Research & Dev.	m	6,109	12,237	40	5	45	0	13	11	177	128	32	0.74	0.18	2.89
General Services	n	6,085	12,295	31	7	38	0	17	15	201	213	21	0.62	0.24	3.27
Admin., Eng., Other	o	27,040	54,805	96	32	128	0	40	35	1,175	140	88	0.47	0.13	4.29
Total		212,850	435,381	2,723	187	2,910	11	1,402	707	16,801	12,253	1,497	1.14	0.33	7.72

U.S. Occupational Injuries and Illnesses for 1998

Covering Petroleum and Petrochemical Operations of Reporting Companies

Table 2 -- Offshore Functions

1		2	3	4			5						6		
Function	Key ⁵	Average Number of Employees	Hours Worked (Thousands)	Recordable Cases			Extent and Outcome of Injury and Illness						Incidence Rates		
				a	b	c	d	e	f	g	h	i	j	k	l
				Injuries	Illnesses	Total	Fatalities	Cases Involving Days From Away Work Plus Days of Restricted Activity	Cases Involving Days Away From Work	Number of Days Away From Work	Number of Days of Restricted Activity*	Non-Fatal Cases Without Lost Workdays	Total Cases	Fatal plus Days Away From Work Cases	Lost Work Days -- Days Away From Work
Offshore Exploration	a	4	14	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00
Offshore Production	b	2,124	4,689	34	0	34	0	15	6	209	115	19	1.45	0.26	8.91
Offshore Drilling	d	243	519	1	0	1	0	0	0	0	0	1	0.39	0.00	0.00
Combinations of Above- Not sep ⁶	abd	1,135	2,693	19	2	21	0	14	8	194	38	7	1.56	0.59	14.41
Total Offshore		3,506	7,915	54	2	56	0	29	14	403	153	27	1.42	0.35	10.18

Incidence Rate Formulas

Column 6(j) = $\frac{\text{Column 4(c)} \times 200}{\text{Column 3}}$

Column 6(k) = $\frac{(\text{Column 5(d)} + \text{Column 5(f)}) \times 200}{\text{Column 3}}$

Column 6(l) = $\frac{\text{Column 5(g)} \times 200}{\text{Column 3}}$

Endnotes

- ¹ E&P data unable to be separated into Exploration or Production functions.
- ² Marketing data unable to be separated into Wholesale or Retail functions.
- ³ Pipeline data unable to be separated into Liquid or Gas functions.
- ⁴ Marine data unable to be separated into Tanker or Inland.
- ⁵ Keyed to definitions outlined in the API Occupational Injuries, Illnesses, and Fatalities Instruction Manual.
- ⁶ If functions cannot be separated as listed, indicate in the 'Key' column the functions for which data is provided on this line. For example, 'ab' (Exploration & Production - Not Separated).

U.S. Occupational Injuries and Illnesses for 1998

Covering Petroleum and Petrochemical Operations of Reporting Companies

a - Exploration
b - Production
(ab) - Exploration & Production - Not Sep.
c - Gas Processing

d - Drilling
e - Petrochemical Manufacturing
f - Refining
g - Marketing - Wholesale

h - Marketing - Retail
(gh) - Marketing - Not Sep.
i - Pipeline - Liquid
j - Pipeline - Gas

(ij) - Pipeline - Not Sep.
k - Marine - Tanker
l - Marine - Inland
(kl) - Marine - Not Sep.

m - Research & Development
n - General Services
o - Admin., Engineering, & Other

Company Name	Average Number of Employees	Hours Worked in Thousands	Recordable Cases			Extent and Outcome of Injury and Illness						Incidence Rates		
			Injuries	Illnesses	Total	Fatalities	Lost Workday Cases				Non-Fatal Cases Without Lost Workdays	Total Cases	Fatal plus Days Away From Work Cases	Lost Work Days -- Days Away From Work
							Cases Involving Days Away From Work Plus Days of Restricted Activity	Cases Involving Days Away From Work	Number of Days Away From Work	Number of Days of Restricted Activity				

All Functions

	Total	212,850	435,381	2,723	187	2,910	11	1,402	707	16,801	12,253	1,497	1.34	0.33	7.72	
ARCO	8,848	19,237	109	1	110	0	55	29	665	755	55	1.14	0.30	6.91	a,(ab),b,d,f,(gh),(ij),(kl),m,n	
ARCO Alaska - Kuparuk ¹	23	50	1	0	1	0	1	1	65	0	0	4.00	4.00	260.00	i	
ARCO Alaska - Oliktok ¹	2	4	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i	
ARCO Pipe Line Co. ¹	658	1,515	11	0	11	0	7	2	124	112	4	1.45	0.26	16.37	(ij)	
Alyeska Pipeline Srvc	846	1,711	10	7	17	0	5	4	61	65	12	1.99	0.47	7.13	i	
Amoco Corporation	17,775	37,412	221	7	228	1	83	30	663	998	144	1.22	0.17	3.54	(ab),e,f,(gh),i,(kl),o	
Amoco Pipeline Co. ¹	600	1,686	6	1	7	0	4	4	50	0	3	0.83	0.47	5.93	i	
Anschutz Ranch East PL	5	13	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i	
BP America	11,709	23,417	0	0	142	0	19	3	0	0	123	1.21	0.03	0.00	(ab),e,f,g,h,	
BWOC	13	31	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	b,g,(ij),n,o	
Belle Fourche Pipeline	77	154	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i	
Buckeye Pipe Line Co.	580	1,350	8	0	8	0	2	2	13	77	6	1.19	0.30	1.93	i	
Butte Pipeline Co.	16	37	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i	
CITGO Petroleum	4,812	10,005	47	3	50	0	21	14	176	366	29	1.00	0.28	3.52	f,g,h,i,n	
CITGO Pipeline Co. ¹	34	99	1	0	1	0	0	0	0	0	1	2.02	0.00	0.00	i	
CITGO Prod Pipeline ¹	31	76	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i	
Calnev Pipe Line Co.	70	134	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i	
Cenex Harvest States	240	488	6	0	6	0	6	0	0	67	0	2.46	0.00	0.00	f	
Central FLA Pipeline	17	34	1	0	1	0	1	1	1	6	0	5.88	5.88	5.88	i	

¹ A subsidiary of another reporting company. Subsidiary numbers are not included in the totals.

U.S. Occupational Injuries and Illnesses for 1998

Covering Petroleum and Petrochemical Operations of Reporting Companies

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Company Name	Average Number of Employees	Hours Worked in Thousands	Recordable Cases			Extent and Outcome of Injury and Illness						Incidence Rates		
			Injuries	Illnesses	Total	Fatalities	Lost Workday Cases				Non-Fatal Cases Without Lost Workdays	Total Cases	Fatal plus Days Away From Work Cases	Lost Work Days -- Days Away From Work
							Cases Involving Days Away From Work Plus Days of Restricted Activity	Cases Involving Days Away From Work	Number of Days Away From Work	Number of Days of Restricted Activity				

All Functions

<i>Total</i>	<i>212,850</i>	<i>435,381</i>	<i>2,723</i>	<i>187</i>	<i>2,910</i>	<i>11</i>	<i>1,402</i>	<i>707</i>	<i>16,801</i>	<i>12,253</i>	<i>1,497</i>	<i>1.34</i>	<i>0.33</i>	<i>7.72</i>	
Chevron Corporation	20,838	41,106	238	44	282	0	131	69	1,673	179	151	1.37	0.34	8.14	(ab),e,f,(gh),(ij),m,n,o
Chevron Pipeline Co. ¹	625	1,225	8	4	12	0	4	3	7	5	8	1.96	0.49	1.14	(ij)
Chicap Pipe Line Co.	21	41	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i,o
Clark Ref & Mrktg	833	1,723	11	0	11	0	5	0	0	201	6	1.28	0.00	0.00	f,
Collins Pipeline Co.	12	26	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i
Colonial Pipeline Co.	678	1,390	2	0	2	0	1	1	4	0	1	0.29	0.14	0.58	i
Conoco Inc.	10,496	21,827	45	2	47	0	14	5	353	122	33	0.43	0.05	3.24	(ab),c,f,(gh),i,(kl),m,n,o,
Dome Pipeline Corp.	53	104	2	0	2	0	1	0	0	16	1	3.85	0.00	0.00	i
Enbridge (U.S.) Inc.	356	732	8	1	9	0	2	0	0	42	7	2.46	0.00	0.00	i
Enbridge Pipelines (ND)	33	69	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i
EnergyPro Inc.	6	17	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	b,
Enterprise Prod Optg	494	1,091	3	0	3	0	1	1	152	0	2	0.55	0.18	27.86	c,i,o,
Equilon Enterprises LLC	9,788	20,194	147	7	154	2	53	35	496	452	99	1.53	0.37	4.91	f,g,h,i,m,o
Equilon Pipeline Co. ¹	1,398	2,862	12	2	14	0	6	5	307	271	8	0.98	0.35	21.45	i
Ewing Bank Pipeline	4	14	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i
Explorer Pipeline Co.	130	277	2	0	2	0	2	2	86	0	0	1.44	1.44	62.09	i
Exxon Co. U.S.A.	16,433	34,187	165	36	201	3	98	19	1,282	831	100	1.18	0.13	7.50	b,f,g,h,(kl),n,o
Exxon Pipeline Co.	430	960	1	1	2	0	1	0	0	25	1	0.42	0.00	0.00	i
Fina Oil & Chemical	2,868	6,123	58	1	59	0	35	12	327	590	24	1.93	0.39	10.68	(ab),e,f,g,h,i,m,o

¹ A subsidiary of another reporting company. Subsidiary numbers are not included in the totals.

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All Functions

	Total	212,850	435,381	2,723	187	2,910	11	1,402	707	16,801	12,253	1,497	1.34	0.33	7.72	
Gensis Pipeline	44	100	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i
Giant Ref Co.	222	503	6	0	6	0	1	0	0	9	5	2.39	0.00	0.00	0.00	f,
Howell Petroleum	133	268	5	0	5	0	3	3	15	0	2	3.73	2.24	11.19	(ab)	
Interstate Energy Co.	26	56	1	0	1	0	0	0	0	0	1	3.57	0.00	0.00	0.00	i
Kentucky Hydrocab	19	43	1	0	1	0	1	1	32	0	0	4.65	4.65	148.84	c,	
Kerr-McGee O & G	544	1,132	3	0	3	0	1	1	5	0	2	0.53	0.18	0.88	a,b	
LOOP LLC	124	248	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	i
Long Drilling Co.	3	4	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	a,
Lyondell-Citgo Ref	1,348	3,130	40	2	42	0	28	17	592	272	14	2.68	1.09	37.83	f,	
Marathon Ashland Pet	7,745	15,096	148	2	150	0	78	8	256	1,114	72	1.99	0.11	3.39	f,g,h,i,k,o	
Marathon Oil Co.	3,382	6,372	28	1	29	0	11	5	266	174	18	0.91	0.16	8.35	a,b,c,d,m,n,o	
Michael D. Lillis	4	3	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	a,b
Mobil East of Rockies ¹	318	640	1	na	1	na	na	na	na	na	na	0.31	na	na	na	i
Mobil Oil Corporation	20,653	40,546	296	11	307	0	151	51	na	na	156	1.51	0.25	na	(ab),e,f,g,h,(ij),l,m,o	
Mobil PL (New Eng.) ¹	13	29	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	i
Motiva Enterprises LLC	4,935	10,038	57	0	57	2	17	10	20	0	38	1.14	0.24	0.40	f,g,h,o	
Nat'l Coop Ref Assn	555	1,060	27	2	29	0	15	10	133	213	14	5.47	1.89	25.09	f,i	
Occidental O&G Corp.	1,014	2,544	11	1	12	0	3	3	76	0	9	0.94	0.24	5.98	(ab),o	
Oiltanking Houston	57	85	1	0	1	0	0	0	0	0	1	2.35	0.00	0.00	0.00	i,n

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U.S. Occupational Injuries and Illnesses for 1998

Covering Petroleum and Petrochemical Operations of Reporting Companies

a - Exploration
b - Production
(ab) - Exploration & Production - Not Sep.
c - Gas Processing

d - Drilling
e - Petrochemical Manufacturing
f - Refining
g - Marketing - Wholesale

h - Marketing - Retail
(gh) - Marketing - Not Sep.
i - Pipeline - Liquid
j - Pipeline - Gas

(ij) - Pipeline - Not Sep.
k - Marine - Tanker
l - Marine - Inland
(kl) - Marine - Not Sep.

m - Research & Development
n - General Services
o - Admin., Engineering, & Other

Company Name	Average Number of Employees	Hours Worked in Thousands	Recordable Cases			Extent and Outcome of Injury and Illness						Incidence Rates		
			Injuries	Illnesses	Total	Fatalities	Lost Workday Cases				Non-Fatal Cases Without Lost Workdays	Total Cases	Fatal plus Days Away From Work Cases	Lost Work Days -- Days Away From Work
							Cases Involving Days Away From Work Plus Days of Restricted Activity	Cases Involving Days Away From Work	Number of Days Away From Work	Number of Days of Restricted Activity				

All Functions

Total	212,850	435,381	2,723	187	2,910	11	1,402	707	16,801	12,253	1,497	1.34	0.33	7.72	
Olympic Pipe Line Co.	66	137	2	0	2	0	2	2	24	0	0	2.92	2.92	35.04	i
Phillips Petroleum Co.	17,801	37,002	192	9	201	1	82	42	764	741	118	1.09	0.23	4.13	(ab),c,e,f,g,h,i,m,n,o
Phillips Pipe Line Co. ¹	660	1,376	17	0	17	0	8	3	8	23	9	2.47	0.44	1.16	i
Placid Refining Co.	200	415	2	na	2	na	na	na	na	na	na	0.96	na	na	f
Plains All American	121	250	6	0	6	0	4	2	2	82	2	4.80	1.60	1.60	i
Plantation Pipe Line	275	531	7	0	7	0	3	3	18	0	4	2.64	1.13	6.78	i
Portland Pipe Line	48	93	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i,o
Questar Pipeline Co.	128	268	7	0	7	0	3	3	29	32	4	5.22	2.24	21.64	j,n,o
Razorback Pipeline Co.	2	5	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i
Santa Fe Energy Res.	396	792	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	a,b,o
Seadrift Pipeline Corp.	92	191	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i,j
Seagull Energy Corp.	492	1,022	5	0	5	0	1	1	5	0	4	0.98	0.20	0.98	a,(ab),b,d,(gh),(ij),j,m,o
Shakespeare Oil Co.	30	57	2	0	2	0	1	1	40	0	1	7.02	3.51	140.35	(ab)
Shell Oil Company	14,410	29,775	103	16	119	0	41	15	204	670	78	0.80	0.10	1.37	a,(ab),b,c,d,e,f,m,n,o
TEPPCO	527	1,124	6	0	6	0	5	4	200	43	1	1.07	0.71	35.59	i
TEPSCO	35	100	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i
Texaco Inc.	8,785	18,189	70	0	70	0	28	18	428	362	42	0.77	0.20	4.71	a,(ab),c,m,n,o
Tosco Ref Co - Avon	714	1,500	17	5	22	0	15	0	0	567	7	2.93	0.00	0.00	f
Tosco Ref Co - Rodeo	415	1,009	10	1	11	0	9	4	143	74	2	2.18	0.79	28.35	f

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U.S. Occupational Injuries and Illnesses for 1998

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							Cases Involving Days Away From Work Plus Days of Restricted Activity	Cases Involving Days Away From Work	Number of Days Away From Work	Number of Days of Restricted Activity				

All Functions

<i>Total</i>	<i>212,850</i>	<i>435,381</i>	<i>2,723</i>	<i>187</i>	<i>2,910</i>	<i>11</i>	<i>1,402</i>	<i>707</i>	<i>16,801</i>	<i>12,253</i>	<i>1,497</i>	<i>1.34</i>	<i>0.33</i>	<i>7.72</i>	
Trans Mtn Oil Pipeline	9	20	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i
TransMontaigne Pipeline	41	89	1	0	1	0	1	1	39	9	0	2.25	2.25	87.64	i
Union TX Petrochem	181	357	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	c,e,(ij),o
United Refining Co.	408	930	41	6	47	0	21	15	142	120	26	10.11	3.23	30.54	f,g,h,i
Valero Ref Co - LA	272	494	12	0	12	0	7	1	7	35	5	4.86	0.40	2.83	f
Venada National	1	2	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	a
West Shore Pipe Line ¹	23	74	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	i
Williams Energy Svcs	2,755	4,833	46	5	51	0	26	23	223	144	25	2.11	0.95	9.23	c,i
Wolverine Pipe Line ¹	54	117	1	0	1	0	0	0	0	0	1	1.71	0.00	0.00	i
Wynnewood Ref Co.	188	423	13	2	15	0	8	6	78	105	7	7.09	2.84	36.88	f

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