Snapshot of Chronic Health Conditions

Prepared for A Sample Manufacturer

Version 4.0.0

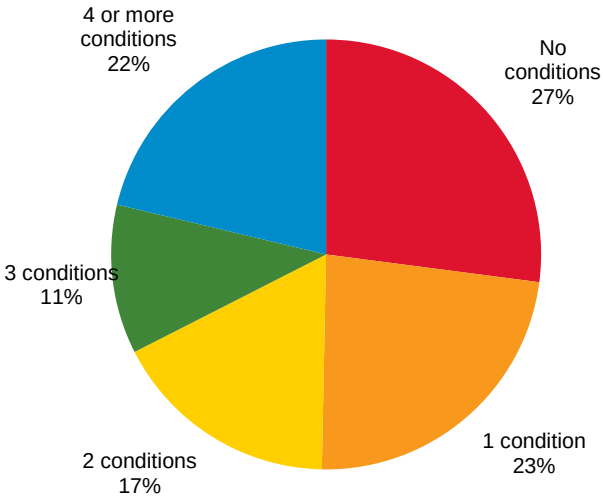
Overview: In addition to medical and disability costs, chronic illnesses are drivers of both incidental sick day absences and presenteeism. This report summarizes the prevalence of chronic health conditions in the workforce, and calls attention to the conditions with the greatest impact on health and productivity.

The report draws on analyses of data in IBI's HPQ-Select database. The HPQ-Select survey is an updated, employer-focused version of the Health and Work Performance Questionnaire (HPQ) that was initially developed by Dr. Ronald Kessler of Harvard Medical School and the World Health Organization. Based on patterns of chronic conditions, absence, and job performance observed among more than 120,000 employee surveys from 64 different organizations, we use your company's demographics and compensation information to develop estimates of the prevalence, productivity impact, and costs of different types of chronic health conditions in your workforce. We report full costs for employees with a condition as well as the costs uniquely attributable to specific conditions (i.e., not including the costs of comorbidities).

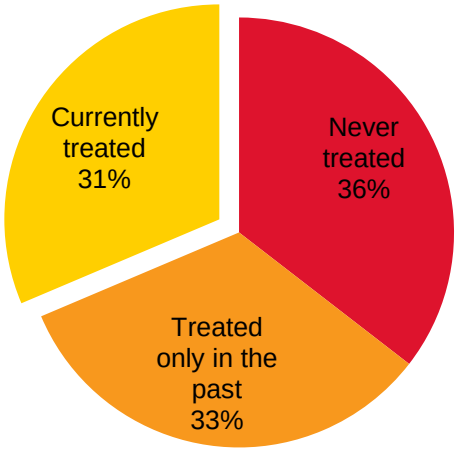
REPORTING BASIS: 10,000 EMPLOYEES IN THE MANUFACTURING INDUSTRY (NAICS 31-33)

SECTION I: Chronic Condition Overview

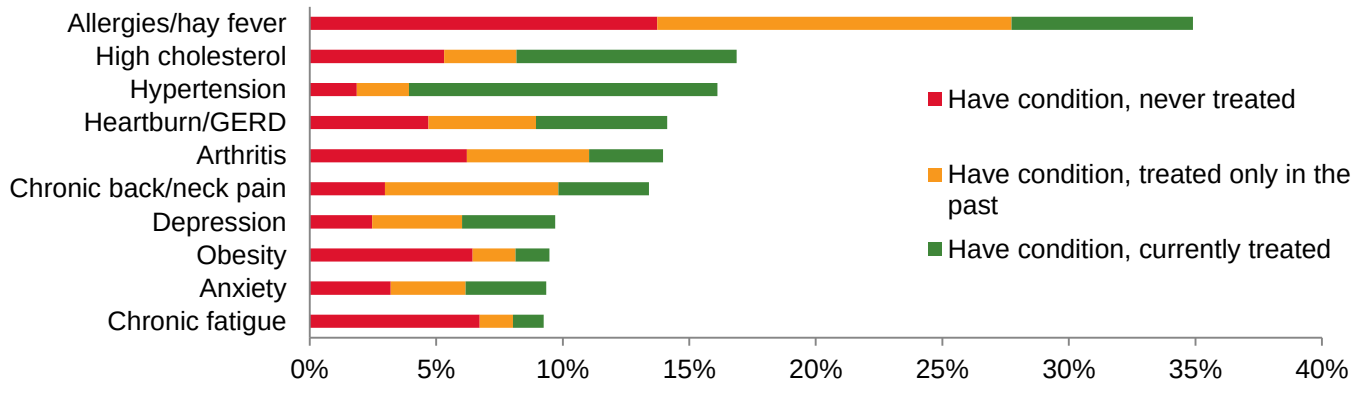
About 73% of employees have at least one chronic condition. An employee with any chronic condition has an average of 3 comorbid conditions.



Only 31% of employees' conditions are currently being treated.



The 10 conditions listed below are the most common in your workforce (% of all employees, by treatment status):



SECTION 2: HEALTH AND PRODUCTIVITY IMPACT OF CHRONIC CONDITIONS

Overall, chronic conditions account for $11.1 million in lost productivity costs per year. †

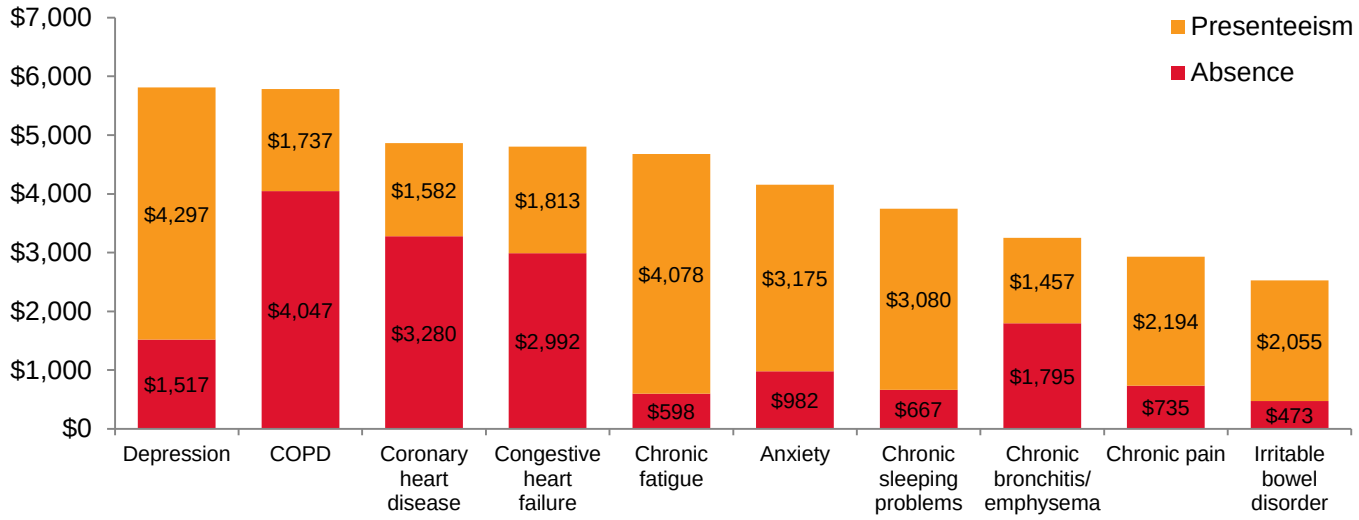
† Excluding claims costs and lost productivity for disability absences.

90% of costs are due to reduced performance ("presenteeism").

THE COSTS OF A CHRONICALLY ILL EMPLOYEE

Compared to similar workers without the condition, workers with any of the following 10 conditions have the highest net absence and presenteeism costs (per employee per year):

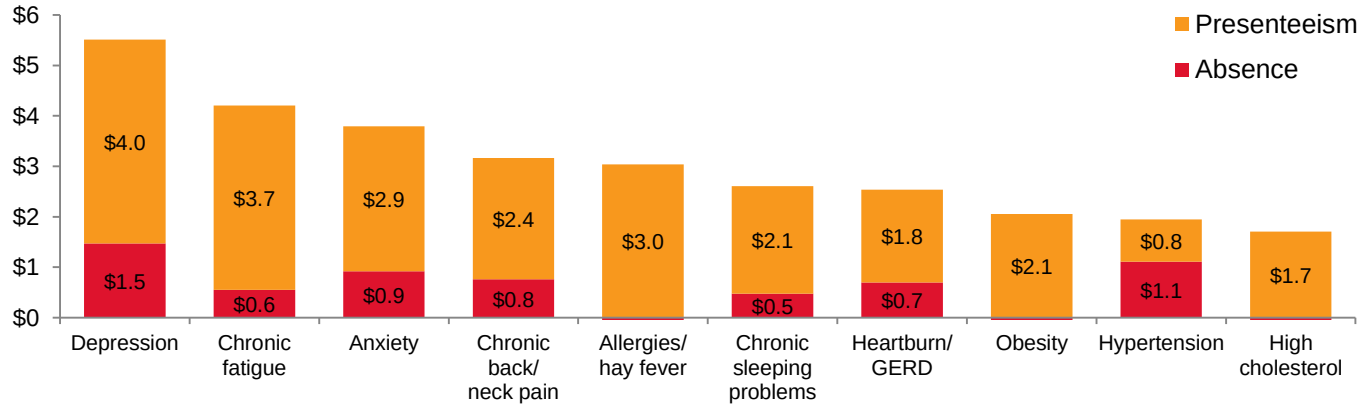
Annual costs in excess of those for a similar worker without the condition



THE COSTS OF ALL EMPLOYEES WITH A CHRONIC CONDITION

Taking the number of empployees with a condition into account, the 10 conditions listed below have the highest annual lost productivity costs (in millions of dollars):

$ millions per year



NOTE ON TOTAL COSTS

The lost productivity costs shown in the charts above and in Section 3 include the the costs of other conditions an employee may have — that is, the same employee might be in more than one condition group. For this reason, the total costs of employees with a condition cannot be summed to derive the total costs of all chronic conditions. IBI calculates the total costs using a model that accounts for comorbidities (see Section 4 for more details).

SECTION 3: DETAILED ANNUAL LOST PRODUCTIVITY OUTCOMES FOR EMPLOYEES WITH CHRONIC CONDITIONS

Condition	% with condition	% in treatment [a]	Avg. # of other conditions [a]	Net lost workdays (absence + presenteeism)[b] thousands	Net lost productivity costs[b] millions
Depression	9.7%	37.9%	5.1	16.5	$5.6
Chronic fatigue	9.2%	13.1%	5.5	12.5	$4.3
Anxiety	9.4%	34.1%	4.8	11.3	$3.9
Chronic back/ neck pain	13.4%	26.7%	4.9	9.4	$3.2
Allergies/ hay fever	34.9%	20.6%	3.0	9.0	$3.1
Chronic sleeping problems	7.1%	38.9%	5.7	7.8	$2.7
Heartburn/ GERD	14.1%	36.7%	4.6	7.6	$2.6
Obesity	9.5%	14.2%	4.6	6.1	$2.1
Hypertension	16.1%	75.7%	3.9	5.8	$2.0
High cholesterol	16.9%	51.6%	3.7	5.1	$1.8
Chronic pain	5.8%	26.6%	6.1	5.0	$1.7
Arthritis	14.0%	20.9%	4.6	4.6	$1.6
Irritable bowel disorder	4.6%	27.7%	5.3	3.4	$1.2
Headaches	7.0%	14.2%	5.1	3.3	$1.1
Migraine	7.0%	20.4%	4.8	3.0	$1.0
Urinary/bladder problems	3.4%	23.4%	5.4	2.2	$0.8
Diabetes	3.9%	89.9%	4.5	1.7	$0.6
Coronary heart disease	1.2%	64.6%	4.9	1.7	$0.6
Asthma	6.6%	43.0%	4.2	1.6	$0.6
Cancer	1.7%	26.6%	4.1	0.9	$0.3
Ulcer	2.1%	21.6%	6.0	0.8	$0.3
Chronic bronchitis/ emphysema	0.7%	34.1%	7.8	0.6	$0.2
Congestive heart failure	0.3%	65.1%	7.8	0.5	$0.2

SECTION 3: DETAILED LOST PRODUCTIVITY OUTCOMES FOR CHRONIC CONDITIONS

Condition	% with condition	% in treatment [a]	Avg. # of other conditions [a]	Net lost workdays (absence + presenteeism)[b] thousands	Net lost productivity costs[b] millions
COPD	0.3%	41.0%	8.5	0.5	$0.2
Skin cancer	1.0%	19.9%	4.5	0.1	$0.0
Osteoporosis	0.3%	47.5%	5.5	0.1	$0.0

a Among workers with the condition.
b Compared to employees without the condition.

SECTION 4: TOTAL NET LOST PRODUCTIVITY

As described in Section 2, because an employee can appear in multiple condition groups, the total costs of employees with a condition cannot be summed to derive the total costs of all chronic conditions. Based on a method described by Alonso et al. (2010)*, IBI developed a comorbidity model that estimates the marginal quanitities of absences and presenteeism that are uniquely attributable to each different chronic condition. The marginal impacts on productivity for each condition are then summed to calculate total lost productivity for the entire workforce.

The table below shows the total lost workday and productivity costs of absence and presenteeism for all chronic conditions. For More information on the model and the conditions-specific marginal impacts, contact Brian Gifford, Ph.D., at bgifford@ibiweb.org.

	Lost Workdays		**Lost Productivity Costs**	
	thousands	% of total	millions	% of total
Absence	3,534.2	11%	$1.1	10%
Presenteeism	29,666.2	89%	$10.0	90%
Total	**33,200.4**		**$11.1**	

* Alonso, Jordi, Gemma Vilagut, Somnath Chatterji, et al., 2010, “Including information about comorbidity in estimates of disease burden: Results from the WHO World Mental Health Surveys,” *Psychological Medicine* , 41(4):873-886.

INTEGRATED BENEFITS INSTITUTE

Appendix

INDUSTRY BASIS: MANUFACTURING (NAICS 31-33)

WORKFORCE, PAY AND BENEFITS

Total headcount	10,000
% full-time workers	93.7%
FTEs	9,687
Total wages and benefits	$712,504,530
Total wages paid to employees	*$472,170,000*
Benefits load	50.9%
Average daily wages paid to employees	$182
Average daily benefits paid to employees	$93

BENEFITS CHARACTERISTICS

% of EEs with paid sick days	62.9%
% of EEs enrolled in STD plan	63.0%
% of EEs enrolled in LTD plan	41.0%
% of EEs enrolled in GH plan	69.7%
Dependent minors per enrolled EE	0.424
Dependent spouses per enrolled EE	0.689
STD wage replacement rate	64.5%
STD maximum weekly benefit	$546
LTD wage replacement rate	58.7%
LTD maximum monthly benefit	$7,500
WC state policies	US workforce average
WC wage replacement rate	66.3%
WC maximum weekly benefit	$855

DEMOGRAPHIC CHARACTERISTICS

% of employees who are female	28.8%
% of employees aged 18-34	26.5%
% of employees aged 35-54	54.1%
% of employees aged 55+	19.4%

OCCUPATIONAL CHARACTERISTICS

% of employees in each EEO occupation class:

Class 1 (officials & managers)	8.3%
Class 2 (professionals)	9.5%
Class 3 (technicians)	2.4%
Class 4 (sales workers)	3.1%
Class 5 (administrative support)	9.5%
Class 6 (skilled crafts & repairs)	12.7%
Class 7 (operators)	47.9%
Class 8 (laborers)	5.6%
Class 9 (service workers)	1.0%

LOST PRODUCTIVITY MULTIPLIERS

Absence	1.39
Presenteeism	1.22

The Total Costs of Workforce Health & Snapshot Data Inputs

BLANK CELLS INDICATE THAT INFORMATION WAS NOT PROVIDED BY USER

NAICS Sector

31-33: Manufacturing

NAICS 3-digit industry

- SELECT NAICS3 -

NAICS 4-digit industry

- SELECT NAICS4 -

Total headcount	10,000
% full-time workers	
Total wages and benefits	
Total wages paid to employees	
% of EEs with paid sick days	
% of EEs enrolled in STD plan	
% of EEs enrolled in LTD plan	
% of EEs enrolled in GH plan	
Are family members enrolled in the GH plan?	-- Select yes or no --
STD wage replacement rate	
STD maximum weekly benefit	
LTD wage replacement rate	
LTD maximum monthly benefit	
FOR WC: IF all or most of your employees work in a single state, select from the pull-down list. Make no selection otherwise.	-- Select a State --

Demographic characteristics

% of employees who are female	
% of employees aged 18-34	
% of employees aged 35-54	
% of employees aged 55+	

OCCUPATIONAL CHARACTERISTICS

% of employees in each EEO occupation class:

Class 1 (officials & managers)	
Class 2 (professionals)	
Class 3 (technicians)	
Class 4 (sales workers)	
Class 5 (administrative support)	
Class 6 (skilled crafts & repairs)	
Class 7 (operators)	
Class 8 (laborers)	
Class 9 (service workers)	

The Total Costs of Workforce Health & Snapshot Data Sources

IBI's health and productivity reports are powered by the highest-quality data sources available. The sources listed below provide the information on which we base industry-level estimates.

Data Element	Source	Resource	Data year
Industry employee headcount (if not provided by user) Average wage Industry occupational distribution	Bureau of Labor Statistics (BLS)	Occupational Employment Statistics	2012
Benefits load	Bureau of Labor Statistics (BLS)	National Compensation Survey	March 2012
Sick day absence rate	Centers for Disease Control and Prevention	National Health Interview Survey (NHIS)	2006-2012
Presenteeism	Integrated Benefits Institute	HPQ-Select	2004, 2009
WC incidence rate	BLS	Injuries, Illness and Fatalities	2012
State WC wage replacement rates and maximum benefit values	National Academy of Social Insurance	*Workers' Compensation: Benefits, Coverage, and Costs, 2010* . 2012. Washington, DC: National Academy of Social Insurance.	2010
STD incidence rate STD absence duration LTD incidence rate LTD absence duration FMLA absence duration WC Absence duration WC Medical costs WC non-wage indemnity costs	Integrated Benefits Institute	IBI Health and Productivity Benchmarking	2012
STD and LTD participation and wage replacement rates	BLS	Employee Benefits Survey	March 2012
Employee GH medical and pharmacy claims costs (Adjusted to 2012 to account for health care spending growth)	Agency for Healthcare Research and Quality (AHRQ)	Medical Expenditure Panel Survey	2011
Employer group health plan coverage rates Industry sex distribution Industry age distribution	BLS	Current Population Survey	March 2012
Lost productivity multiplier method	Nicholson, S., Pauly, M.V., Polsky, D., et al.	"Measuring the effects of work loss on productivity with team production," *Health Economics* , vol. 15, issue 2, pp111-123.	2006