



Lost Work Time and Costs for Employees' COVID-19 Cases

Applying county and industry
assumptions based on
U.S. Census Bureau microdata

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May 20, 2020

Agenda

About IBI

Modeling approach

Lost work time costs for employees' COVID-19 cases

The revised model

Applies county and industry assumptions based on U.S. Census Bureau microdata

Map demo

<https://www.ibiweb.org/resource/employee-covid-19-cases-metro-areas/>

About IBI

**Focus on workforce
health & productivity**



1,300+ corporate members

Develop & provide:



Research



Data



Tools



Learning
opportunities

So business leaders can:

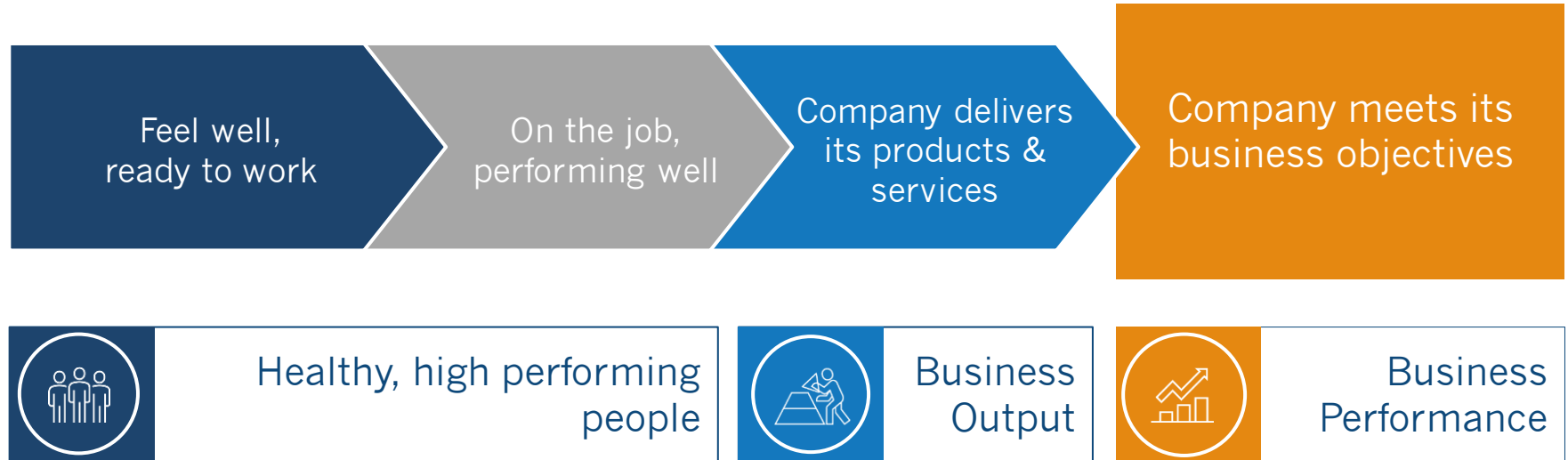


Understand the toll that illness
takes on employee productivity



Recognize the business value of
investments in employee health

The Business Case for a Healthy Workforce



Background

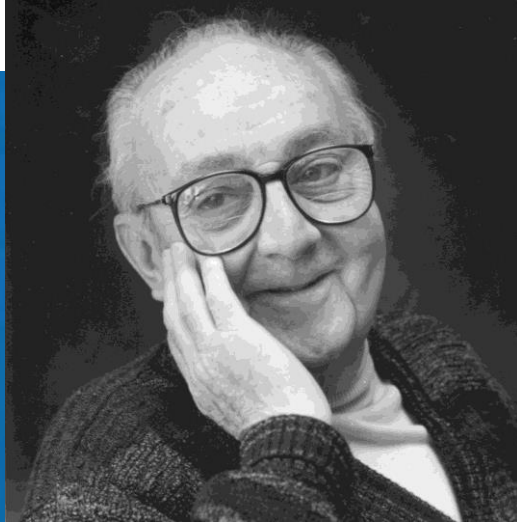
- April 6, 2020: IBI publishes model of absence and short-term disability (STD) costs for employees' COVID-19 cases
- Method applied national average employment, wage, and benefit eligibility to low, mid and high projections of confirmed cases

	Low	Mid	High
Total US cases	4.0M	8.0M	15.0M
Employee cases	1.5M	3.0M	5.6M
Total costs	\$6.1B	\$12.7B	\$23.3B

The Good News

- Growth rate of confirmed COVID cases has slowed
 - Doubled every ...
 - 2 days from 3/17 – 3/24 → 4 Million cases by early April
 - 4 days from 3/25 – 3/31 → 4 Million cases by mid April
 - 45 days from 5/13 – 5/19 → 4 Million cases by late July

George E. P. Box, 1919-2013, British statistician, Fellow of the Royal Society



“

Essentially, all models are wrong, but some are useful.

”

Revised Approach Makes the Model More Useful

- From general assumptions about U.S. private sector employees, to more specific assumptions based on geographic variation in cases
 - 1 in 5 cases in Manhattan
- Use nationally representative microdata as source of employment and wages at county and state level
 - Census Bureau's American Community Survey (ACS)
 - Employee's industry as a proxy for STD-eligibility
 - Wage replacement rates in future models
 - Accommodates particularities of CA, NJ and NY SDI
- Apply to county-level COVID-19 cases

Comparison of Key Assumptions

	U.S. model	County model
Employee cases	38%	45%
EES Eligible for STD	38%	52%
EES Eligible for SDI	..	17%
Avg. daily wage	\$200	\$256
Avg. STD wage	\$124	\$149
Avg. CA SDI wage	..	\$141
Avg. NY SDI wage	..	\$31

Map Demo

Cumulative Results
through May 20, 2020



Questions

Comments, critiques, suggestions ...

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