

What to Expect from a Successful Ergonomics Initiative

Humantech has conducted a review of case study data presented at recent ergonomics conferences to better understand how companies have described their success in ergonomics. To date, 54 case studies have been reviewed from various conferences including the Applied Ergonomics Conference and the National Ergonomics Conference and Exposition.

This document summarizes anecdotal, self-published data regarding ergonomics success. To be considered for inclusion, the data must have been provided in writing with the company name and location given. In most cases, the information was presented by a company representative.

There are two types of success stories, each summarized independently, as the metrics vary considerably:

- **Organization-wide** results are predominantly reported as improvements to health and safety metrics.
- **Project-specific** results typically include impacts to production performance as well as health and safety metrics.

References for each of the data points summarized on the following pages can be found beginning on page 7.

Organization-wide Success

Organization-wide, companies experienced the following (mean) health and safety success rates:

- WMSD lost work days down **80%** overall (50% per year)
- WMSD rate down **79%** overall (17% per year)
- Workers' compensation costs down **70%** (65% per year)
- Incidence rate down **58%** overall (31% per year)

These results are shown in Figures 1 and 2, and detailed in Table 1.

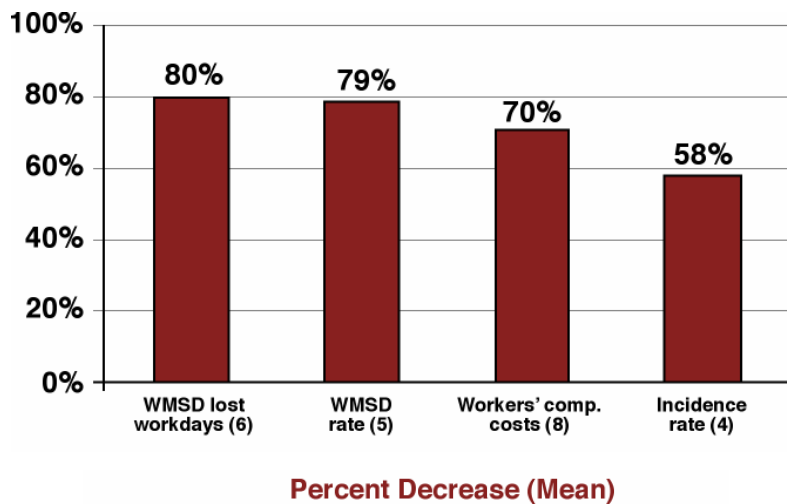


Figure 1. Organization-wide Health and Safety Improvements – Overall

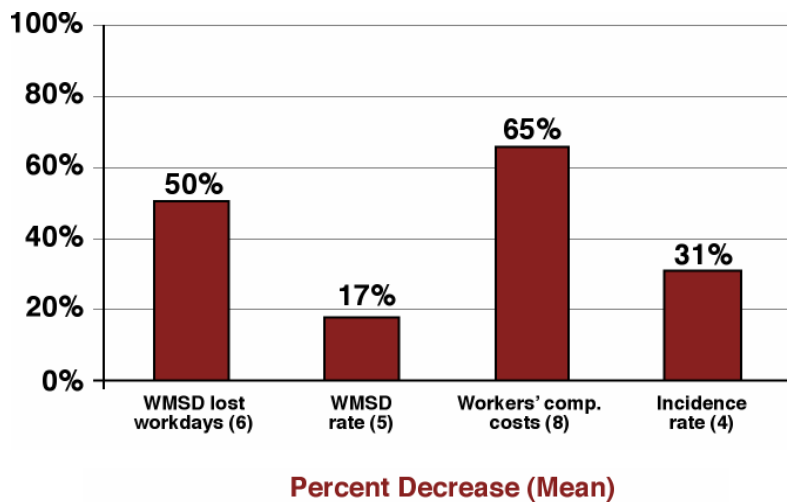


Figure 2. Organization-wide Health and Safety Improvements – Per Year

Table 1. Organization-wide Health and Safety Improvements

Metric	Mean	Company	Success
Reduction in WMSD lost work days	80% (50% per year)	Hilltop Energy – Mineral City, OH	100%
		Bucyrus Precision Tech. – Bucyrus, OH	98%
		Masonic Home and Hospital – Wallingford, CT	92%
		ChevronTexaco – Multiple locations	80%
		Lawrence Memorial Hospital – New London, CT	67%
		Hasbro Games – East Longmeadow, NJ	43%
Reduction in WMSD rate	79% (17% per year)	Hilltop Energy – Mineral City, OH	100%
		Textron Automotive – Multiple locations*	90%
		Bucyrus Precision Tech. – Bucyrus, OH	85%
		TRW – Cookeville, TN*	83%
		Crystal Care – Mansfield, OH	39%
Reduction in workers' compensation costs	70% (65% per year)	Wisc. Alum. Foundry – Manitowoc, WI	96%
		SAS – Cary, NC	96%
		Masonic Home and Hospital – Wallingford, CT	77%
		Northrup Grumman – Sausalito, CA	74%
		Aventis Pharmaceuticals – Kankakee, IL*	66%
		Lawrence Memorial Hospital – New London, CT	62%
		Verizon – Multiple locations	57%
		Cookson Group – Multiple locations	35%
Reduction in incidence rate	58% (31% per year)	John Deere – Greeneville, TN	74%
		Verizon – Tampa, FL	65%
		Raytheon – Multiple locations	50%
		Wisc. Alum. Foundry – Manitowoc, WI	43%

* Detailed case study described on the Client Results page of www.humantech.com.

Project-specific Success

Companies reported remarkable project-specific success including the following (mean) performance and health and safety related improvements:

- Productivity up **88%**
- Cycle time down **42%**
- Recordable incidents and WMSD incidents down **100%** in all cases
- Cost of quality down **\$1,388,155**
- Annual labor costs down **\$332,777**
- Annual injury costs down **\$189,556**

These results are shown in Figures 3 and 4, and detailed in Tables 2 and 3.

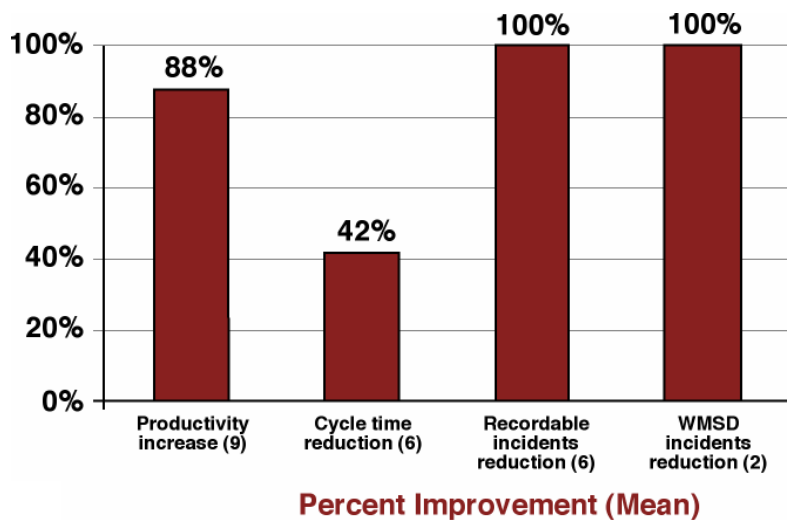


Figure 3. Project-specific Improvements – Percentage Impact

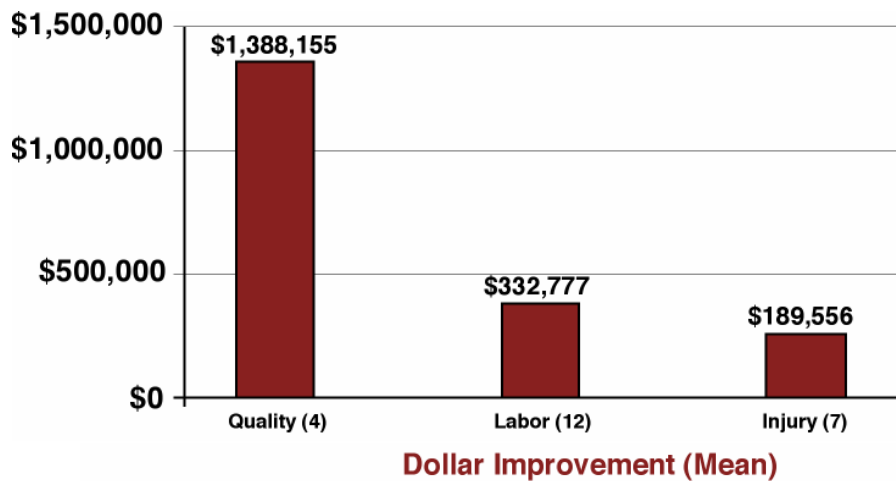


Figure 4. Project-specific Improvements – Dollar Impact

Table 2. Project-specific Performance Improvements

Metric	Mean	Company	Success
Increase in productivity	88%	Dow Corning – Hemlock, MI*	375%
		GM – Pontiac, MI	176%
		GE – Waukesha, WI	73%
		Lucent – Columbus, OH*	44%
		Honeywell – Torrance, CA*	37%
		Johnson & Johnson	33%
		Ligon Brothers – Almont, MI*	25%
		Goodrich – Carroll, IA	25%
		Irwin Mortgage – Los Angeles, CA	2%
Reduction in cycle time	42%	Honda – Lincoln, AL	88%
		Toyota – Georgetown, KY*	62%
		Honda – Marysville, OH*	50%
		International Truck – Melrose Park	25%
		Hon Industries – Cedertown, GA	15%
		Honda – Alliston, ON	11%
Reduction in cost of quality	\$1,388,155	Corning – Goose Creek, SC*	\$3,600,000
		Ford – Wayne, MI	\$1,400,000
		Ford – Wayne, MI	\$516,000
		DaimlerChrysler – Toledo, OH	\$36,620
Reduction in annual labor costs	\$332,777	Lucent – Columbus, OH*	\$1,200,000
		GE - Budapest	\$850,000
		Ford – Wayne, MI	\$549,000
		Dow Corning – Hemlock, MI*	\$300,000
		Ford – St. Thomas	\$300,000
		Toyota – Georgetown, KY*	\$262,000
		GE – Decatur	\$160,000
		Honda – Barry, ON	\$97,200
		Honeywell – Torrance, CA	\$94,000
		GE – Waukesha, WI	\$83,125
		Honda – Lincoln, AL	\$78,000
		Goodrich – Carroll, IA	\$20,000

* Detailed case study described on the Client Results page of www.humantech.com.

Table 3. Project-specific Health and Safety Improvements

Metric	Mean	Company	Success
Reduction in recordable incidents	100%	Dow Corning – Hemlock, MI*	100%
		GE Multilin – Markham, ON	100%
		GE – Waukesha, WI	100%
		GM – Pontiac, MI	100%
		Honda – Alliston, ON	100%
		Ligon Brothers – Almont, MI*	100%
Reduction in WMSD incidents	100%	3M – Valley, NE	100%
		GE – Decatur, AL	100%
Reduction in annual injury costs	\$189,556	Honda – Marysville, OH	\$500,000
		DaimlerChrysler – Toledo, OH	\$332,442
		Ford – Wayne, MI	\$295,000
		BJC Healthcare – St. Louis, MO	\$89,037
		Honda – Alliston, ON	\$64,000
		GE – Decatur, AL	\$47,500
		GE Multilin – Markham, ON	\$28,000

* Detailed case study described on the Client Results page of www.humantech.com.

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