

eBook

# Deploying a Large-Scale Ergonomics Process: Year by Year

*VelocityEHS*<sup>®</sup>





# Contents

<b>About this eBook</b>	<b>3</b>
<b>Year 1: PREPARE</b>	<b>4</b>
1. Identify gaps/fit/policy/plan	4
2. Select supporting software	4
3. Identify roles and responsibilities	5
4. Follow the job improvement process	5
5. Implement training	5
<b>Year 2: DEPLOY</b>	<b>6</b>
1. Establish rhythm	6
2. Engage operators	6
3. Categorize, prioritize, and plan improvements	7
4. Identify metrics	7
<b>Year 3: EXPAND</b>	<b>8</b>
1. Eliminate hazards	8
2. Expand your team	8
3. Qualitative feedback	9
4. Mine your data	9
<b>Year 4: SUSTAIN</b>	<b>10</b>
1. Integrate	11
2. Expand your training	11
3. Audit	11
<b>Year 5+: ENHANCE</b>	<b>12</b>
1. Challenge yourself	12
2. Network	12
3. Benchmark	12
<b>Conclusion</b>	<b>13</b>
<b>VelocityEHS Accelerate® Platform</b>	<b>14</b>



---

## About this eBook

Large organizations often launch an ergonomics process only to have it “fizzle” when the business climate and direction changes, when key participants change, or when the low-hanging, easy fixes have been completed. Failure to initiate and maintain an effective process can result in loss of credibility and trust by employees and management, wasted resources, and poor results.

The key to long-term success in ergonomics is to build a strong foundation with solid planning. This eBook will review the critical elements of establishing, deploying, and, most importantly, sustaining a large-scale workplace ergonomics process to identify risk factors and prevent musculoskeletal disorders. Based on real-world experience, proven management practices, and data mined from hundreds of successful programs from around the globe, this eBook will provide a roadmap to follow year by year. We'll discuss goal setting, implementation, training, design guidelines for engineers, tackling capital projects, program expansion, and more.

### This eBook will teach you

- the necessary steps and metrics required to roll out a large-scale ergonomics process year by year,
- the order and timeframe in which to successfully deploy the elements of the process,
- how to sustain the momentum over the long term, and
- how to identify gaps and strengths in your current approach.

Identifying simple activity metrics to strive for annually will help you sustain the momentum for the ergonomics process over the long term. Metrics are paramount and can often derail the process if they are too difficult to achieve.

Examples of popular company safety metrics include:

- Reduce Total Case Incident Rate (TCIR) by X%
- Reduce Workers' Compensation Costs by X%
- Reduce total injuries by X%
- 0 injuries by 2024!

Rate-related metrics are important to monitor, but they do not give you the insight into how or why injuries occur or what you can do about them. When it comes to ergonomics, there should be leading metrics that stay steady for the life of the process, such as:

- % of workstations at high risk
- % of body areas at high risk
- % reduction of MSD score

Simple annual strategies focused on activity metrics will help you understand where you want to go and how you're going to get there. Although this is laid out year by year, organizations can move as fast or slow through this process as they deem fit based on their resources, experience, and expertise.

### Here are the important categories of metrics that will be identified for each year.



Training



MSD Risk Factors



Direct Causes



Employee Engagement



Risk Reduction



Return on Investment



---

## Year 1: PREPARE

Ergonomics has been identified as one of the important focus pillars for your company this year and the responsibility falls on your shoulders. **How are you going to get this right?** The key to long-term success with rolling out an ergonomics process is to build a strong foundation with well-thought-out planning in Year 1 before getting too deep into deployment. Companies often think that if they get their hands on an assessment tool, all of their problems will be solved. A robust ergonomics process includes more than just assessments. It should be all-encompassing, covering training, assessments, improvement management, and strategic reporting.

The first year should include the five steps that follow.

### 1. Identify gaps/fit/policy/plan

The first step in the process is to identify where you are currently, where you want to go, and how you are going to get there. It is important to truly reflect on your organization, the available resources, capabilities, and understanding of what you can achieve. Create policies that are easy to follow and set realistic, attainable goals to help your ergonomics process get off the ground.

Create guidance documents based on feedback and an understanding of the organization as a whole; engage sites in the discussions. Once an appropriate policy and guidance document are created, communicate this information to all groups that will be accountable.

### 2. Select supporting software

Enhancements in software over the last 10 years make the purchase of software a mandatory part of any ergonomics initiative. Using software will improve efficiency and accuracy, provide global access, and help to create a long-term, sustainable process. The software you select should include not just assessment tools, but an overall job improvement process, including training, management of improvements, built-in design guidelines, and easily accessible data mining dashboards and reports. Look for software that is easy to set up with minimal customization. Customization is becoming a synonym for “build it yourself,” which can delay deployment. Another key to software purchasing is to buy only from vendors who provide support. While support from a technical help desk is typically standard, also make sure you will have access to ergonomics experts and customer success teams. This will enhance your experience and ensure that you never feel alone throughout the process. It should feel like a true partnership, not just a transaction.

## Year 1 Metrics



### Training

- % of stakeholders signed off on policy
- # of people trained (based on role)



### MSD Risk Factors

- # of jobs assessed
- # of sites with ergonomics teams trained



### Employee Engagement

- % of sites with ergonomics teams identified



### 3. Identify roles and responsibilities

Clearly defined responsibilities are essential for holding people accountable for the quality of assessments, improvements, and overall MSD risk reduction. Area managers, line supervisors, production and process engineers, continuous improvement teams, and space planners should have authority control, as well as influence in the design and setup of the workplace, equipment, product design, and workflow.

Everyone should play a part in the ergonomics process. Take the time to understand and describe how each function in the organization can contribute to the success of the process. Integrate your ergonomics process into the existing company structure. For example:

- Engineers should be trained and held accountable for following design guidelines during new product or equipment introduction.
- Quality should be involved in reporting risk areas.
- Procurement should compare new purchases with established best practices/ergonomics design guidelines.
- Managers and supervisors should communicate with their teams on the implementation of improvements and, if they see an issue that is easy to address, make the necessary change.

Clearly defined roles and responsibilities for ergonomics describe what these key people are expected to achieve in supporting ergonomics improvement and risk reduction in the workplace. Rather than defining an extensive list of responsibilities, which may create additional burden, limit them to a well-thought-out few that align well with each role and function.

### 4. Follow the job improvement process

The software you have selected should help guide your ergonomics team members through the job improvement process. Software will only be as good as the data you're entering, so it is imperative that the job improvement process is completed fully and accurately. And don't forget about operator engagement; communicate with them throughout the job improvement process and involve them in all phases, from idea generation to decision making to implementation.

### 5. Implement training

Standard instructor-led training can be time-consuming and costly. Consider combining on-demand online training with on-site workshops. This approach will confirm knowledge retention and create that "light bulb" moment for all participants. Focus on knowledge retention and proficiency when starting out to ensure that inaccuracies are corrected quickly without leading to bad habits.



## Year 2: DEPLOY

Keep in mind that Year 1 does not have to be 365 days. You should move through the proposed timeline at the pace that is right for your organization. Some of these elements may have already be initiated through other programs within your organization (for example, development of a team), so pick and choose what is effective for you. In Year 2, start to focus on true deployment, ensuring you have an established drumbeat, accurate information, and a solid understanding of the process and buy-in from leadership. This is the year of planning.



### 1. Establish rhythm

From the first to second year, continue to focus on simple, easy-to-achievable goals that create focus around the process. A consistent cadence will help this initiative gain momentum. Hold consistent meetings (take attendance), provide visibility around progress to goals, communicate more often than you think you should, and hold people accountable to identified metrics across all groups.

### 2. Engage operators

Communication and involvement from operators are key to success during all years of an initiative. This is often a focus area when starting to do assessments, but it can fall off the radar over the years. Communicate with operators throughout the job improvement process. Gather feedback about discomfort, improvement opportunities, and general feedback. When solutions have been planned, keep operators up to date on timelines, and get their buy-in and involvement during implementation and follow-up activities.

## Year 2 Metrics



### MSD Risk Factors

- # of jobs assessed
- % of jobs assessed across facility/organization



### Risk Reduction

- # of improvements identified
- % of improvements moved from "waiting for decision" to "in progress"
- # of improvements implemented
- % of follow-up assessments completed (where improvements were completed)
- % of risk reduction



### Direct Causes

- # of direct causes identified and addressed
- % of high-risk jobs with direct causes identified



### Employee Engagement

- # of reports of discomfort from operators



### 3. Categorize, prioritize, and plan improvements

A lot of companies want to spend their first year of an ergonomics initiative completing assessments. At the end of the year, if all you have are assessments, with no improvements implemented resulting in risk reduction, then you shouldn't expect to see injuries or workers' compensation costs decrease. Emphasize improvements, not just the assessments. Review improvements during each team meeting and update their status. Improvements should not be "waiting on decision" for more than two meetings in a row. Every improvement should have at least the following pieces of information:

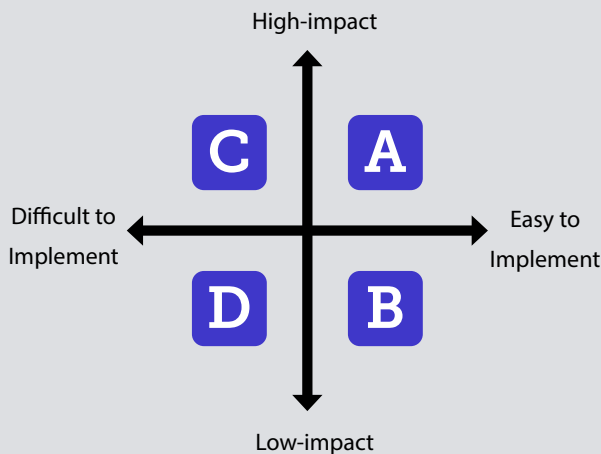
- Detailed description
- Budget estimate
- Owner responsible for moving it through to completion
- Category (hierarchy of controls)
- Priority (based on impact and cost)
- Status (for example, waiting on decision, in progress, completed, etc.)

### 4. Identify metrics

When identifying metrics and targets that will drive your process, consider identifying your long-term strategy first and then working your way backward to see what can be accomplished each month, quarter, and year. For example, if one of your activity metrics is to complete assessments for all jobs across the plant in three years, you'll need to know:

- How many jobs are there at the plant?
- How often are new processes/jobs introduced annually?
- How many people do we have on the team?
- How much time does each team member have to complete assessments per month?

From there, you should be able to determine what your monthly completed assessment target should be for your ergonomics team. This can be replicated for all targets/metrics. When developing goals, make sure that the goals of the team are aligned with the goals of the people funding the process.



## Year 3: EXPAND

By the time you reach your expansion year, you should have figured out what works, what doesn't, what adjustments should be made, and best practices. Now you can start to expand the team, extend your reach, and get others involved. If it isn't already, this is when ergonomics should start to feel more infused in your company culture.

### 1. Eliminate hazards

Although you decided to kick off your ergonomics process two years ago, it doesn't mean that you had unlimited budget to complete your improvements two years ago. The first couple of years of the process should be focused on implementing solutions that are low-cost/high-impact (the low-hanging fruit). This is often more out of necessity and less out of priority. Sometimes it takes a couple of years to show proof of concept, return on investment, and to get through budget approval for larger ticket items. Year 3 should focus less on quick wins and more on big, high-impact wins that have been planned.



### 2. Expand your team

Consider expanding or reinvigorating your ergonomics team by including new folks. Key people to include are engineering, maintenance, quality, and purchasing team members. Also consider expanding your assessment scope to more departments; don't forget about infrequent tasks or groups that perform a variety of tasks (drivers, maintenance, continuous improvement groups, shipping/receiving, etc.).

## Year 3 Metrics



### Employee Engagement

- % of change in reports of discomfort (employee feedback)



### Return On Investment

- Cost (\$) to implement solutions
- Injury reduction (workers' compensation \$ or # of injuries) in areas where improvements were implemented



### Risk Reduction

- Trending on-target risk-reduction goals
- % of high-risk jobs
- % of high-risk jobs reduced to low- or moderate-risk
- % of jobs with follow-up assessments completed





### 3. Qualitative feedback

By now your process is established and the majority of people involved should be able to answer these questions:

- What is ergonomics?
- Who are members of the ergonomics team?
- What are some solutions that the ergonomics team has implemented in your area?

Gather qualitative feedback from operators to ensure you're doing the right things and the organization recognizes the impact. Ask questions like:

- Do you feel the company is taking steps to improve processes in your area?
- Do you feel the ergonomics team has kept you involved in the process?
- Do you feel the company has made significant improvements in the last few years?
- Do you have any discomfort when performing your job?
- Have you felt discomfort when performing your job in the last two years?

### 4. Mine your data

Now that you have significant data in your database, mine this information to guide the next three years. Justify improvements by sharing your results and give visibility to the impact you're having on the organization. Examples of mining data more deeply include:

- How much are we spending on ergonomics improvements?
- How much impact are we having on workers' compensation costs and injuries?
- How much are we spending for each point risk reduction?

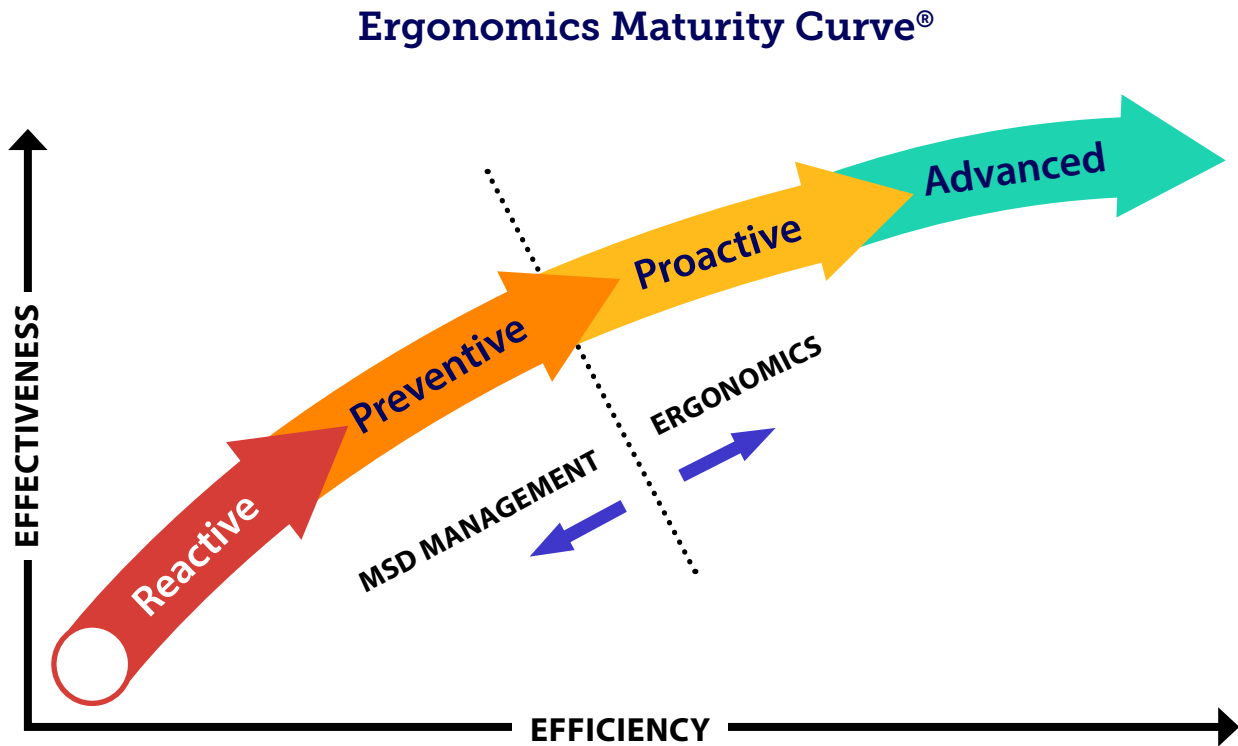
Mining your data will also give you insight into the solutions that have had the biggest impact. With this information, you can create a company equipment catalogue or "greatest-solution" log that can be used to create efficiencies around the process of brainstorming.



## Year 4: SUSTAIN

Companies sometimes think that focusing on ergonomics for one or two years is sufficient and will solve their problems. It is important to recognize that

ergonomics is not a program with a definitive end. It is ongoing and should be ingrained in your culture. Companies are always changing, jobs are always changing, products are ever-changing—and your ergonomics process has to adapt.



## Year 4 Metrics



### Training

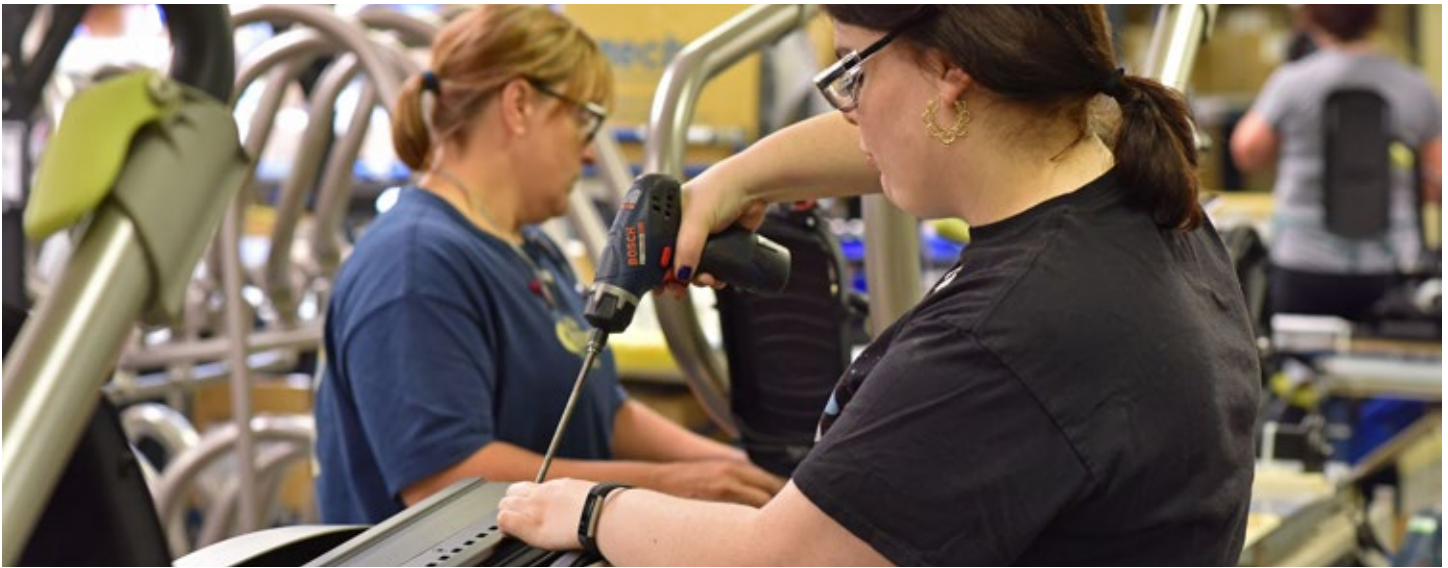
- # of locations audited
- % of locations with improved annual audit score



### Risk Reduction

- # of high-risk jobs introduced
- % of high-risk jobs
- % of high-risk body areas





## 1. Integrate

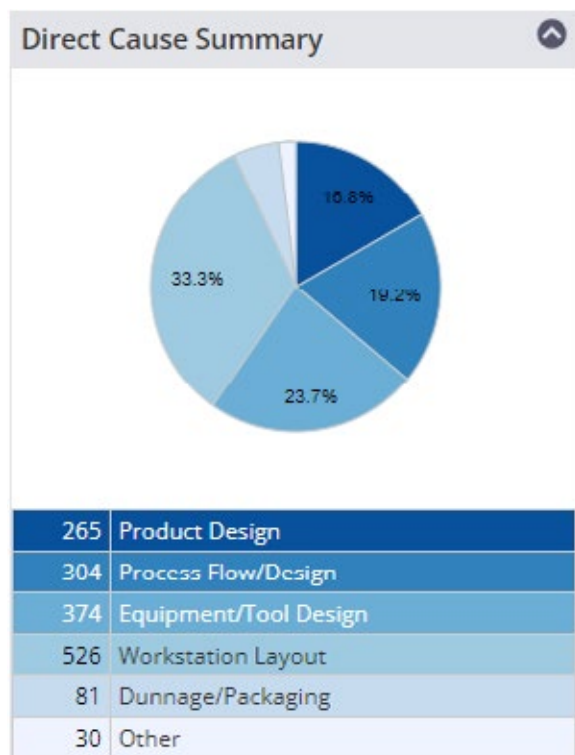
Integrate the ergonomics process into your robust continuous improvement team, engineering team, and/or pilot team. Although this should be done as soon as possible, this is your chance to really ensure that this has taken hold. Check in to see if engineers are using the ergonomics assessment tools when introducing new products and equipment. Ensure your continuous improvement teams are using the design guidelines for ergonomics whenever they're implementing changes across the organization. Companies are typically using various software platforms into the double digits. With so many platforms, look for opportunities to integrate dashboards whenever possible.

## 2. Expand your training

If you have been identifying and categorizing direct causes in the job improvement process, you will be able to determine which main direct cause categories are affecting the presence of risk factors, for example:

- Product design
- Process flow/design
- Equipment/tool design
- Workstation layout
- Dunnage/packaging

This will guide you toward who may require more in-depth ergonomics training.



## 3. Audit

Formal audits may only happen at sites every few years, but that doesn't mean that you shouldn't be performing regular check-ins and reviews throughout the process. Always be on the lookout for accuracy and opportunity for improvement. Start to evaluate links between assessments and injuries, as well as risk factors, direct causes, and improvements. For more information about a formal auditing process, see: [Five Key Elements of an Ergonomics Process Audit eBook](#).



---

## Year 5+: ENHANCE

Your ergonomics process doesn't end after five years, but here are some things to consider when you feel like you're a veteran ergonomist and your ergonomics process is rolling along nicely. There is always more to learn and opportunity for enhancement.

### 1. Challenge yourself

Always push the envelope and challenge yourself and the ergonomics team to do better. You may have addressed all high-risk jobs in your facility, leaving no more at that same level of risk; now dig deeper and aim for no high-risk body areas on the ergonomics risk assessment. Aim to get scores as low as possible. Getting a new set of eyes on the jobs and digging deeper into the data will help determine the most effective solutions with the highest impact.

### 2. Network

You can always learn something new from others. Consider attending software user summits (if provided by your software vendor), networking events at tradeshow, or speaking sessions at conferences. If you can get the budget, giving your ergonomics team access to these same opportunities is a great way to reward them.

### 3. Benchmark

Many companies have mature and robust ergonomics initiatives in place. Look for opportunities to benchmark with companies in a similar industry or region. There are often publicly available resources to compare company health and safety information. Webinars are another great resource to see how you're doing compared with others. Also ask your ergonomics vendors to put you in touch with companies that have shown success. You can connect over the phone or even visit facilities. With the exception of proprietary product information, people are usually more than willing to discuss their process and share best practices. You'll learn a lot from each other.



## Year 5 Metrics



### Training

- % of teams/members retrained
- New leadership/stakeholders committed



### Risk Reduction

- # of high-risk body areas eliminated
- % of risk reduction versus goal



### Employee Engagement

- # of new team members trained
- # of conferences/networking events attended



### Return on Investment

- 3- and 5-year return on investment
- \$ of productivity, quality, and safety savings



---

## Conclusion

Establishing your ergonomics improvement process involves a lot of work: setting a goal and support structure, gaining leader sponsorship and ownership, training and preparing people to assess and reduce MSD risks, and continually tracking and reporting activities and results. Once you've established your process, your focus must shift from deploying it to sustaining it.

*Sustaining* the improvement process means that people stay involved and achieve results, and that the process fits into the organization and is ongoing. Tracking key metrics and regularly evaluating and adjusting your focus and goals to maintain momentum and continue your success are proven paths to sustainability.

There is no perfect timeline or path that companies should take to ensure success. It is the combination of knowing what works and what will work for your organization. The speed at which you move down your path is dependent on a number of factors, so don't get discouraged. This is a marathon, not a sprint.





## Wherever you operate, the VelocityEHS Accelerate® Platform is there.

The VelocityEHS Accelerate® Platform delivers best-in-class performance to help you achieve EHS & Operational Excellence. The software drives expert processes so that every member of your team can produce outstanding results.

Join the largest global software community of EHS experts and thought leaders, and see how easy your job can be when you're backed by a VelocityEHS team that is passionate about your success.

VelocityEHS is your global partner, with offices around the world, serving customers in over 140 countries and in 20+ languages.



[Request a Demo](#)

### Contact Us Today!

Toll Free:  
1.866.919.7922

Visit us online:  
[www.EHS.com](http://www.EHS.com)



[Contact Us](#)

