

# HIERARCHY OF CONTROLS



In Lean processes, a control is a tool used to maintain the implemented changes and the desired way of completing a task.

Controls are implemented during the Plan Do Study Act (PDSA) and validated during Define-Measure-Analyze-Improve-Control (DMAIC) cycles.

There are many types of controls that can be put into place, with some being better than others. The deciding factor(s) for the level of control should be based on the risk associated with slippage.

<b>Potential Controls (In Order of Effectiveness)</b>	
<b>Fundamental Change</b>	This is the most effective as the environment has shifted from how it was done before. This could be removal of old equipment, changing how the work area is set up or renovations. Simply put there is no way of going back to the old way of working.
<b>Error Proofing</b>	A prevention-type system will ensure errors cannot be made and consistency is maintained.
<b>Visual Controls</b>	An effective way of alerting everyone to what and how something should be done. Usually has color coding or pictures accompanying it.
<b>Standard Work</b>	The key is that the work is completed the same way each time by different people, either visually managed or proceduralized.
<b>Training</b>	Ensures everyone that is currently completing a process can learn the new process. The only issue arises if the process has not fundamentally changed, as then the training will slowly diminish as additional people are brought into the process that have not been trained.
<b>Continue to Measure</b>	Maintains the process by watching movement of the data points and creates accountability.
<b>Audits</b>	By nature, audits are retrospective so they tell the user something that has already <b>happened</b> . Effective controls are preventative rather than reactive.
<b>Checklist</b>	Is very labor intensive and dependent on the user. Often must be interpreted. Compliance is often an issue.
<b>Policies and Procedures</b>	Good for training and clarification but as an ongoing control very ineffective and usually difficult to access as required.
<b>Written Signs</b>	Most signs quickly become “wall paper”.