

Occurrence Potential (O) for the Process

Potential Failure Causes rated according to the criteria below. Consider Prevention Controls when determining the best Occurrence estimate. Occurrence is a predictive qualitative rating made at the time of evaluation and may not reflect the actual occurrence. The occurrence rating number is a relative rating within the scope of the FMEA (process being evaluated). For Prevention Controls with multiple Occurrence Ratings, use the rating that best reflects the robustness of the control.

O	Incidents per 1000 items/vehicles	Type of Control	Prevention Controls
10	>= 100 per thousand >= 1 in 10	None	<u>No</u> prevention controls.
9	50 per thousand 1 in 20	Behavioral	Prevention controls will have <u>little</u> effect in preventing failure cause.
8	20 per thousand 1 in 50		
7	10 per thousand 1 in 100	Behavioral or Technical	Prevention controls <u>somewhat</u> effective in preventing failure cause.
6	2 per thousand 1 in 500		
5	0.5 per thousand 1 in 2,000		Prevention controls <u>are</u> effective in preventing failure cause.
4	0.1 per thousand 1 in 10,000		
3	0.01 per thousand 1 in 100,000	Best practices; Behavioral or Technical	Prevention controls are <u>highly</u> effective in preventing failure cause.
2	< 0.001 per thousand 1 in 1,000,000		
1	Failure is eliminated through preventive control.	Technical	Prevention controls are <u>extremely</u> effective in preventing failure cause from occurring due to design (e.g. part geometry) or process (e.g. fixture or tooling design). Intent of prevention controls- Failure Mode cannot be physically produced due to the Failure Cause.

Prevention Control Effectiveness: Consider if prevention controls are technical (rely on machines, tool life, tool material, etc), or use best practices (fixtures, tool design, calibration procedures, error-proofing verification, preventive maintenance, work instructions, statistical process control charting, process monitoring, product design, etc.) or behavioral (rely on certified or non-certified operators, skill trades, team leaders, etc.) when determining how effective the prevention controls will be.