



Tuesday, June 4th

Safety in the Palm of Your Hand

H+M's Guide to Hand and Power Tool Risk Mitigation

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H+M

INDUSTRIAL EPC





Safety in the Palm of Your Hand

- History of H+M Tool Safety
- Introducing the Tool Pocket Guide
- Tool Book Implementation
- Benefits and Results
- Future Use/Applications

History of H+M Tool Safety

Tool-related Incidents

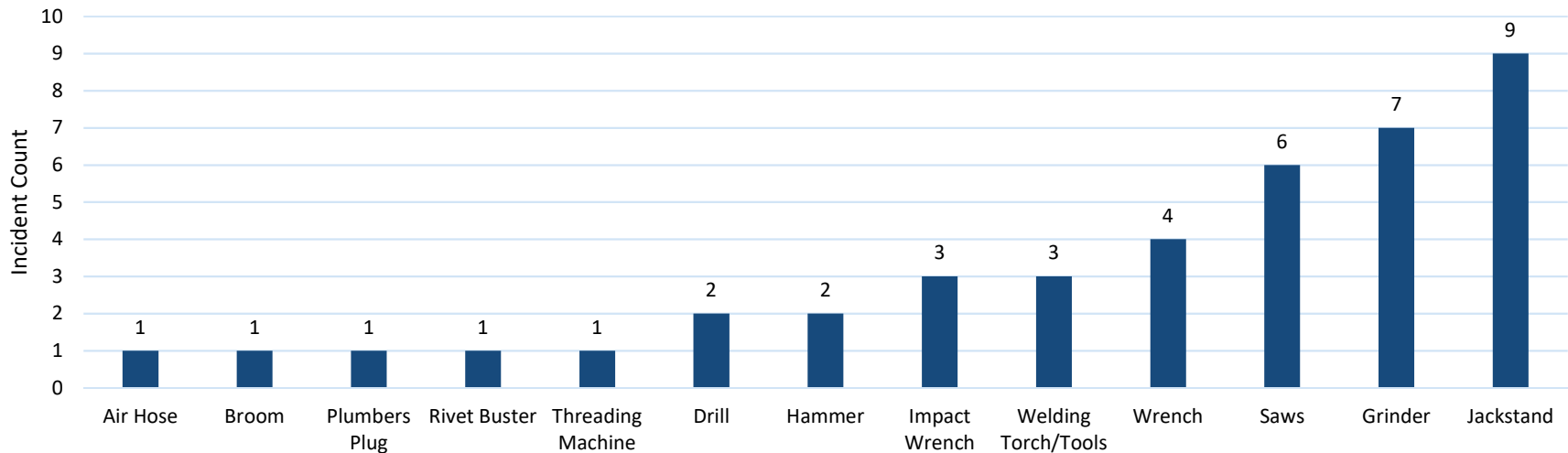
2015-2019

41

Causal Factors:

- PPE Use/Selection
- Tool Misuse
- Body Positioning
- Lack of training

Top Offenders 2015 - 2019



Introduction of the Tool Booklet

What's included?

- H+M's Mission, Vision & Values
- General Tool Safety Guidelines
- Quarterly Tool Inspection Color Guide
- Risk Matrix & PPE Glossary
- 21 Specific Tools
 - Photo
 - Hazards
 - Required PPE
 - Safeguards



Risk Matrix & PPE Glossary



Personal Protective Equipment required (PPE): Icon Glossary

Impact		Probability			
Hazard Severity	Injury Type	A - Very Unlikely A sporadic combination of factors required for an incident to result	B - Unlikely A rare combination of factors would be required for an incident to result	C - Possible Could happen when additional factors are present but otherwise unlikely to occur	D - Likely Not certain to happen but an additional factor may result in an accident
1. Slight	Slight health effect/injury (First Aid)	A1	B1	C1	D1
2. Minor	Minor health effect/injury (RW or MT)	A2	B2	C2	D2
3. Major	Major health effect/injury (LT)	A3	B3	C3	D3
4. Severe	Permanent Total Disability or single fatality	A4	B4	C4	D4
5. Disastrous	Multiple serious injuries or fatalities	A5	B5	C5	D5
Green (Low)		Blue (Medium)		Orange (High)	

Classification	Risk Reduction Techniques
Low	Manage for continuous improvement. May be acceptable; however, review tool use to see if the risk can be reduced further.
Medium	The task should be evaluated to take the hazards involved into consideration. Risks should be reduced as low as reasonably as possible prior to tool use (i.e. substitute tool with a lower risk tool where possible (Angle Grinder vs Bench Grinder), inspect the tool before use, wear appropriate PPE, etc.)
High	Supervisor approval required. Tool use should only proceed with appropriate management authorization after consultation with the HSE Department.



Face Shield



Body Protection



Hearing Protection



Respiratory Protection



Foot Protection



Hard Hat



Cut Resistant Gloves



Safety Glasses



Angle Grinder



Risk: Medium (C3)			
	Hazards <ul style="list-style-type: none">• Kickbacks causing severe cuts• Loud noises• Flying particles and debris from a shattering disc• Electrical shock• Dust• Rotating Blade		
Required PPE			
			
Standard PPE	Hearing Protection	Fitted Clothing (i.e. Shirt tucked in)	Face Shield
Required Safeguards			
<ul style="list-style-type: none">• Tool must not have lock-on switch• Handle and Guard must be installed• Tool must be protected with GFCI• Grinding disc must meet RPM or exceed grinders RPM• Select the right wheel for the job• Do not wear loose or dangling garments or jewelry			





Implementation

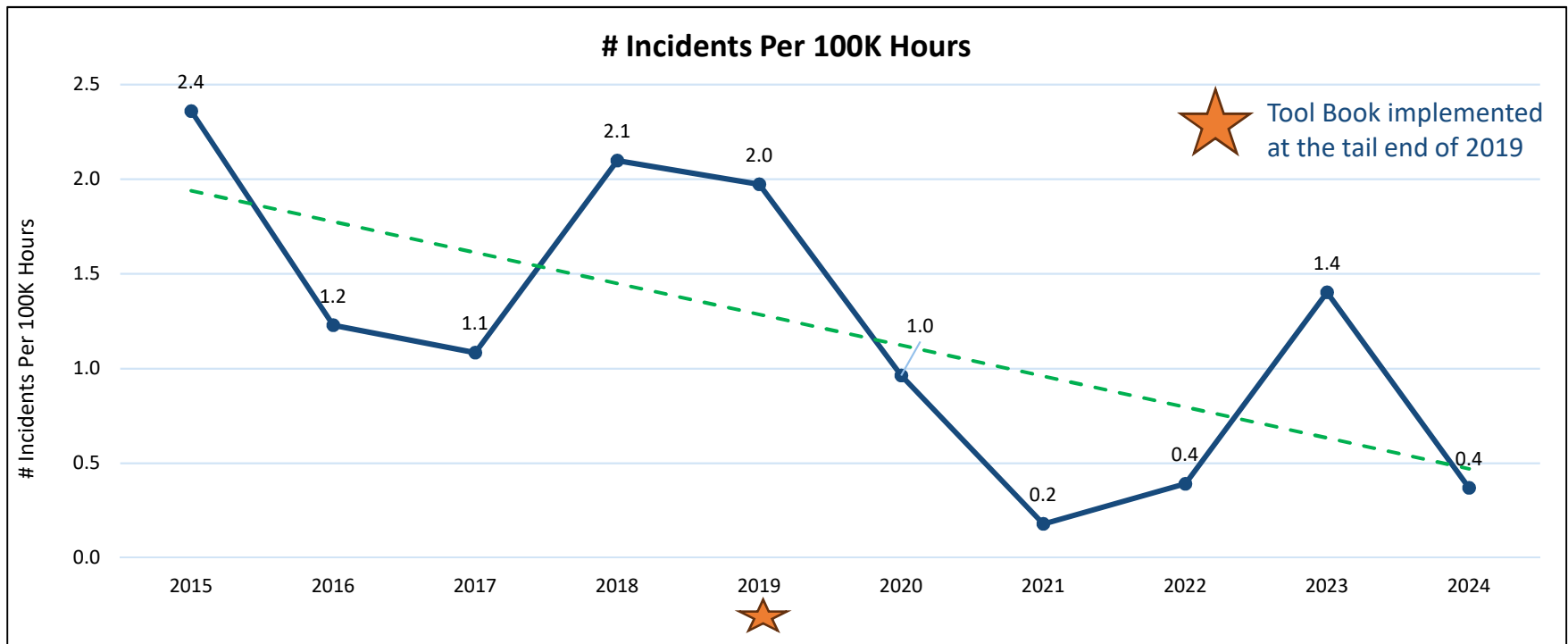
Benefits & Results

- Increased Worker Competency and Awareness
- Higher Quality JSAs
- Reduced tool-related incidents

AVG Rate
Pre-Implementation
1.74

AVG Rate
Post-Implementation
0.74
(does not include 2024)

58% Reduction 





Future Use & Applications

How can the tool book concept be used at my facility/company?

Q & A