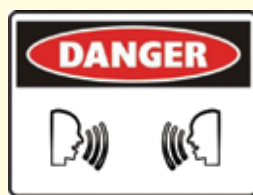
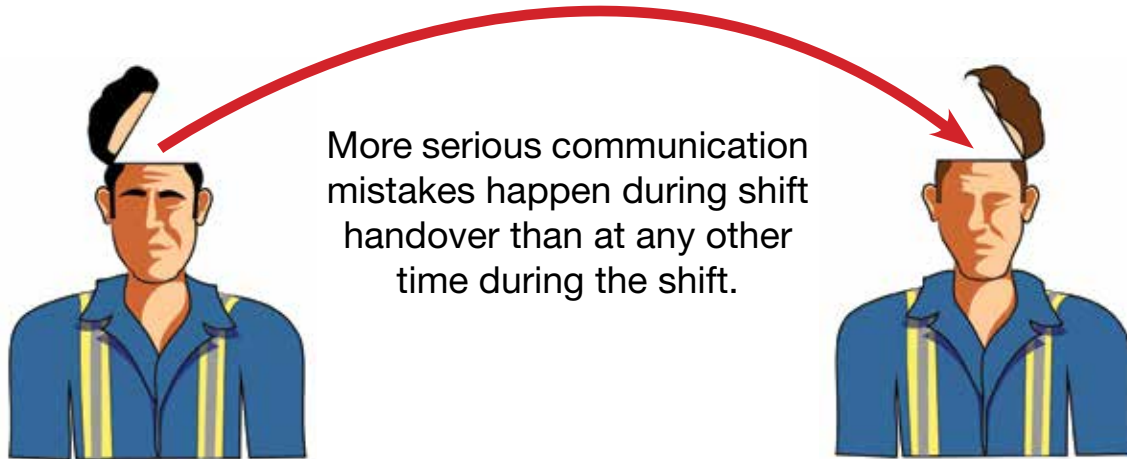


Shift Handover: The Most Dangerous Communication



50% of all serious mistakes happen in the first 30 minutes after an employee returns to work.

The best handovers:

- Involve face-to-face conversations
- Use a logbook with checklists and illustrations

The worst handovers:

- Use blank-page logbooks
- Rely on employees' memories and writing skills



Talking Points

- Are bad handovers causing operating problems at our site?
- Do we need to incorporate illustrations or checklists into our shift handovers?

This Safety Minute was prepared by Larkin Communication (www.larkin.biz) in partnership with CEP.
For more information, download the expanded PDF online at www.aiche.org/cep.

How to Create a Better Shift Handover

Worst

Blank-Page Logbooks

Employees write notes onto a blank page or screen.
This creates the worst handovers.

- 80% of industrial sites use blank-page logbooks for their handovers.
- Blank-page logbooks are associated with many operating errors.
- Blank-page logbooks rely on supervisors' memories and writing skills—and this leads to mistakes.

Source: Thompson, B., and T. Plocher, "Structured Approach to Shift Handover Improves Situation Awareness," Honeywell Process Solutions, www.asmconsortium.net/Documents/2011_HUG_Engen_ThompsonWhite%20Paperfinal.pdf (Accessed Jan. 8, 2019).

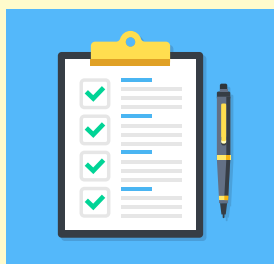


Better

Checklist Logbooks

Employees use checklists to make fewer serious handover mistakes.

- Handovers using checklists take about 15% more time but are preferred over blank-page logbooks by 75% of users.



- Employees remember more when using checklists.
- When nurses changed from a blank-page logbook to a checklist logbook, there was a 56% reduction in serious medical errors.

Source: Landro, L., "Hospitals Combat Errors at the 'Hand-Off,'" *The Wall Street Journal*, <https://www.wsj.com/articles/SB115145533775992541> (June 28, 2006).

Best

Illustration or Photo Logbooks

Employees using illustration- or photo-based logbooks, which are often created with software tools, remember the most information.



Using an Illustration:

- During the handover, both employees do an imaginary walk-through of the site.
- Both employees, stopping at major locations, talk about anything important at that location.

Source: Occupational Safety and Health Administration, "Drilling Rig Components," www.osha.gov/SLTC/etools/oilandgas/illustrated_glossary.html (2001).

Using Handover Software

- Use software to create a 3D model of your site. Use that model in crafting a handover strategy.
- Pins and popup boxes describe what's happening at important locations.



Source: Weule, D., "Shift Handover Excellence – The Overlooked Key to Safety and Production Performance," 5D Consulting Whitepaper, www.qldminingsafety.org.au/wp-content/uploads/2016/08/Daniel-Weule-Next-GenerationShift-Handovers-for-Greater-Safety-Performance.pdf (2012).

This Safety Minute was prepared by Larkin Communication (www.larkin.biz) in partnership with CEP.

Shift Handover: References

Research looked at **serious communication mistakes** involving critical equipment during shift handover in **aircraft maintenance workshops**.

Parke, B., *et al.*, "Shift Turnover Related Errors in ASRS Reports," *Proceedings of the 12th International Symposium of Aviation Psychology*, Dayton, OH, p. 918–923, www.researchgate.net/publication/252105871_shift_turnover_related_errors_in_ASRS_reports (Apr. 14–17, 2003).

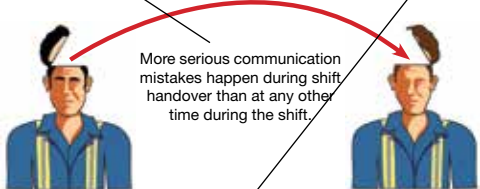
Research looked at **serious operating mistakes** recorded in NASA's Aviation Safety Reporting System by **air traffic controllers**.

Rocco, D., "The Role of Shift Work and Fatigue in Air Traffic Control Operational Errors and Incidents," Report #DOT/FAA/AM-99/2, *FAA Civil Aeromedical Institute*, www.faa.gov/data_research/research/med_humanfacs/oamtechreports/1990s/media/AM99-02.pdf (Jan. 1999).

TJ LARKIN
LARKIN COMMUNICATION

SAFETY Minute

Shift Handover: The Most Dangerous Communication



More serious communication mistakes happen during shift handover than at any other time during the shift.


DANGER 50% of all serious mistakes happen in the first 30 minutes after an employee returns to work.

The best handovers:

- Involve face-to-face conversations
- Use a logbook with checklists and illustrations

The worst handovers:

- Use blank-page logbooks
- Rely on employees' memories and writing skills



Talking Points

- Are bad handovers causing operating problems at our site?
- Do we need to incorporate illustrations or checklists into our shift handovers?

This Safety Minute was prepared by Larkin Communication (www.larkin.biz) in partnership with CEP. For more information, download the expanded PDF online at www.aiche.org/cep.

Research looked at **videotaped handovers** involving **machine assembly**, where subjects were people in the community.

Parke, B., *et al.*, "Passing the Baton: An Experimental Study of Shift Handover," *Proceedings of Human Factors and Ergonomics Society Annual Meeting*, 54 (5), p. 502–506, <https://journals.sagepub.com/doi/abs/10.1177/154193121005400502> (2010).