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Science For A Better Life

Electronic Data Capture

Advantages & Disadvantages

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■ Agenda

■ Advantages & Disadvantages

- Electronic Field Notebooks
- Temperature Monitoring: Data Loggers vs. Wired/Wireless Systems
- Excel Spreadsheets

■ Electronic Archiving

Electronic Field Notebooks - Advantages



- Easy to use data once entered
- Automatically signed and dated as entered
- Easy to transfer original data to the Study Director
- Less QC time
- Handwriting
- Easy to set-up

Electronic Field Notebooks - Disadvantages



- Challenging environment
- Internet Speed
- No backup/paper copy
- Data entry may be slower in the field
- Adding new data collection forms



Temperature Monitoring - Advantages

Data Loggers

- Continuous monitoring
- May have reporting capability
- May have audit trail
- Cost
- Portable

Wired/Wireless Systems

- Continuous monitoring
- Reporting capability
- Audit trail
- Alarms
- Equipment status

Temperature Monitoring - Disadvantages



Data Loggers

- File conversion
- Lack of alarm
- Data download

Wired/Wireless Systems

- Network/internet dependency
- Cost



Excel Spreadsheets - Advantages

- Easy to use
- Ability to lock cells/spreadsheet
- Data import
- Reporting ability
- Data sharing



Excel Spreadsheets - Disadvantages

- No audit trail
- No electronic signature
- Easy to turn security off



Excel Spreadsheets

- Verification or Validation?
 - Simple calculations should at least be verified.
 - Complicated calculations, especially those with Macros, should be validated.



Electronic Archiving

- Space
- Cost
- Retention
- Storage media
- Storage location



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Thank you!

Any Questions?

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