



ELECTRONIC RECORDS MANAGEMENT PROCEDURE

3.04

Effective Date: 07/18

Purpose: The electronic records management procedure applies to all electronic records of the Barren River District Health Department (BRDHD). Policies and procedures for traditional formats of records are well-established and discussed in detail in the Department for Public Health Administrative Reference Manual: Retention Schedule. This procedure applies and extends the policies and practices for records management to problems resulting from the transition from paper-based to electronic recordkeeping and archiving.

Failure to Comply: Agency failure to comply with this procedure may result in violation of federal or state law. Employee failure to comply with this procedure may result in disciplinary action up to termination of employment.

Procedure: Definition of Records

The return on this investment in electronic records management will take various forms:

- Improved staff management, training and workflow due to better documentation of past activities.
- Decreased technological and human resource burden of staff developing their own record keeping systems because they do not trust or have easy access to agency record keeping systems.
- Increased ability to gain funding for new programs based on thorough documentation of past outcomes.
- Decreased technological and human resource burden of preserving records that no longer have retention value.
- Lower resource burden when migrating records to new technology, due to the appropriate capture and maintenance of metadata.
- Increased efficiency in meeting Open Records Act requests.
- Avoidance of lawsuits based on the unwarranted destruction of or inability to provide access to records.

BRDHD programs routinely create and accumulate records as they undertake client care and communications. These records are vital to the process of managing and monitoring patient care, and providing a historical record of decisions, changes, and outcomes.

Public record or record means all books, papers, maps, photographs, cards, tapes, disks, diskettes, recordings, and other documentary materials, regardless of physical form or characteristics, which are prepared, owned, used, in the possession of or retained by a public agency (KRS 171.410).

Records can be created and stored using many different media and formats, including paper-based files or computer systems, on a single medium or as multimedia. Records can also be transferred from one medium to another and from one context to another through copying, imaging or digital transfer. Electronic records are easily updated, deleted, altered and manipulated. Electronic record is defined as a record created, generated, sent, communicated, received, or stored by electronic means (KRS 369.102). The Kentucky Revised Statutes (KRS) authorize using of optical imaging as a valid duplication or reproduction media (KRS 171.660) and the records produced in this format are considered public record (KRS 61.870, KRS 7.107 & KRS 171.450.)

BRDHD follows the guidelines set out in the Kentucky Department of Public Health, Records Retention Schedule. The agency must demonstrate the following elements in the imaging procedures:

- Accuracy and completeness of records
- Maintenance and retention of documentation
- Audit trails and security
- Access to records
- Backup
- Equipment maintenance
- Training programs
- Compression algorithms
- Migration of data

Accuracy and Completeness of Records

A. The goals of electronic records management that may be affected by file format decisions include:

1. Accessibility – the file format must enable authorized employees to find and view the record.
2. Longevity – The file format must have the ability to be supported long term.
3. Accuracy – File conversion should result in records with an acceptable level of data, appearance, and relationship loss.
4. Flexibility – the file format must have the ability to share and use.
5. Proprietary and non proprietary file formats
 - Proprietary – controlled and supported by just one software developer, or can only be read by a limited number of other programs.

- Non-proprietary – supported by more than one developer and can be accessed with different software systems.

BRDHD has selected a TIFF (tag image file format) and PDF file format for medical records, immunization records, and communications. TIFF is a raster graphics file and does not require a software program to open the file. PDF files use multiple programs to open the files. A PDF reader will be made available as long as the records are archived in this format. All other documents utilize the Microsoft Office Suite programs.

B. Document Scanning Requirements

- Resolution – 300 X 300 DPI minimum; de-speckling; de-skewing; blank page drop out; advanced image enhancement.

C. Indexing stored records

- All electronically stored records have a set standard index for ease of search.
- Medical and Immunization records use an SQL database with last name, first name, date of birth, and social security number as fields.

D. Quality Assurances are required from the document scanning company before delivery:

1. Prepping phase – files are checked for scanning quality and records checked to assure documents are in the correct file.
2. Indexing phase – bar code is affixed to the document cover sheet that will associate that document with a unique identifying number. This eliminates lost information as any lost numbers will be identified in the next step.
3. Scanning phase – trained personnel physically check each image for clarity and quality. Before documents are burned to CD/DVD, it will undergo an additional QA by the company's production manager or other qualified staff. If any batch does not meet the standard of quality then the documents are re-scanned. After the documents are burned to a CD/DVD qualified personnel check the CD/DVD before it is released.
4. The CD/DVD is delivered to Finance/IS Director with transfer form to be signed by the company and our agency.

Maintenance and Retention of Documentation

BRDHD will follow a system development life cycle to ensure software and hardware upgrades, necessary or requested are documented and all current data will migrate effectively. This will be accomplished by identifying all data formats and software to access the data currently used. All new hardware and software will be tested with current systems to assure they work as intended and that it meets applicable standards of performance, reliability, integrity, and security.

Audit Trails and Security

In order to maintain record content, agencies should follow best practices in the information technology profession for data integrity. Systems should be in place to ensure that:

- The identity of a record's creator is verified (through the use of a password and possibly encryption),
- Permission to read and write files is appropriately restricted,

- Periodic system audits are conducted,
- Data transmission includes data error checking and correction,
- Data are regularly backed up, and
- Data on offline media such as magnetic tape are regularly refreshed to avoid catastrophic loss of data due to medium degradation.
- Medical records prior to electronic format was scanned and converted to Microfiche tapes.
- The medical records, immunization records, and other program files are stored on a separate server with access given to two lead clerks per county who were identified by their supervisor, Director of Finance, and the IS department.
- Lead Clerks access only the county in which they work. Each clerk has an individual login. They look up a record and print the contents (all or partial) per request from a patient or other source using the request form and following the procedures and security outlined in the Administrative Reference Manual.
- Supervisor can access all records if needed to assist the county clerks in completing their job functions.
- Director of Finance accesses the system to verify transfer of records has occurred and usability of the system.
- IS Department uploads the records and pulls reports to monitor activity.

Backup

- A backup copy of all image files and indexes are created at point of data update.

Equipment Maintenance

- Server maintenance – Regular checks for updates and patches are downloaded and tested for viability.
- Scanners – the end user verifies the readability of each document as it is scanned.

Training Programs

Training is required initially and as each person who will use the system is replaced.

Migration of Data

One important consideration when systems are replaced or upgraded is whether any of the electronic records stored in the old system need to be retained and migrated into the new system. This process can be routine if the records are stored in a simple structure or in a format that is compatible with the new system and if they are readily identifiable and well described. Often little thought has been given to the questions of retention or migration, however, so detailed analysis may be necessary to identify which records need to be retained and to determine how to transfer them to the new system.

- All records when ready for archiving/storage are boxed and indexed. The index is sent to the program designee who verifies the information is complete and assigns each box a unique number. The box is marked with the number and a copy of the index is placed in the box.

- When records are ready to be digitized, the data records contractor is notified. The contractor will retrieve the data from the site. Each site has an identified contact person who verifies the contractor employee picking up the records. A transfer data sheet is used to identify the records taken and signed off on by a BRDHD employee and the person picking up the records.
- The contractor will take the records to their secure facilities. The facilities have electronic access controls to monitor authorized personnel in and out of secure fire prevention equipped vaults.
- All records are stored in a secure warehouse for six months until a letter of approved destruction is signed.
- Between the times the contractor picks up the records and the files are uploaded on the BRDHD server, free access is given to authorized BRDHD employees. They can call or email the contractor requesting the records and the company will fax the record.
- The contractor will shred the records through another company but are done onsite with oversight and a certificate of destruction is provided.

Forms: None

References: [Department for Public Health Administrative Reference Manual: Retention Schedule](#); [Open Records Act](#); [KRS 171.410](#); [KRS 369.102](#); [KRS 171.660](#); [KRS 61.870](#); [KRS 7.107](#); [KRS 171.450](#); [Kentucky Department of Public Health, Records Retention Schedule](#);

Contact Persons: Director of Finance; Director of Information Systems

Date Adopted:

Procedure Origination, Revision, and Review Tracking

Procedure Version Number	Origination Date	Description of Revision or Reviewer Name
3.04	12.14.2017	HR Manager – Procedure Creation