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| <p>Team Name: Health Information Services</p> <p>Team Lead: Regional Manager Health Information Services</p> <p>Approved by: VP - Corporate Services</p> | <p>Reference Number: ORG.1410.PL.303</p> <p>Program Area: Health Information Services</p> <p>Policy Section: Health Information</p> |
| <p>Issue Date: June 29, 2016</p> <p>Review Date:</p> <p>Revision Date: February 1, 2017</p>  | <p>Subject: Disaster Management and Recovery of Paper Based Records</p>   |

**POLICY SUBJECT:**

Disaster Management and Recovery of Paper Based Records

**PURPOSE:**

To provide guidance and direction in the event of an incident or disaster where records have been lost or stolen, contaminated or damaged i.e. water, fire, mould, etc.

To ensure reasonable precautions are implemented to protect Personal and Personal Health Information from fire, theft, vandalism, deterioration, accidental destruction or loss and other hazards in accordance with *The Personal Health Information Act (PHIA)* and *The Freedom of Information and Protection of Privacy Act (FIPPA)*.

**BOARD POLICY REFERENCE:**

Executive Limitation (EL-02) Treatment of Clients  
 Executive Limitation (EL-07) – Corporate Risk

**POLICY:**

- Security safeguards shall be in place to protect Personal and Personal Health Information from damage, minimize disruption, ensure stability, and provide for orderly recovery.
- Southern Health-Santé Sud will develop written agreements with potential disaster recovery vendors or alternative service providers and locations as needed.
- Recovery of Personal and Personal Health Information shall be addressed as quickly as possible.
- Current records will have priority over inactive or records past the set retention periods.

**DEFINITIONS:**

ORG.1411.PL.502.SD.01 PHIA Definitions

### Absorbent Material:

- Material used to absorb water in the event of water damaged records. This may include paper towels.

### Disaster:

- An incident or event that overwhelms the Site's or Region's normal resources and coping ability and therefore requires extraordinary measures including outside help, the involvement of different organizations and possibly the use of the Incident Management System.

### Lost Records:

- An exhaustive search has been conducted to locate a missing record and it is determined that it cannot be located.

### **PROCEDURE:**

1. Assess the situation and mitigate the risk of further damage. Consider:
  - 1.1. Has the source of devastation and/or the contaminant been identified and addressed?
    - If not, do you require plastic sheeting for further protection of records?
    - If not, do you need to move files to prevent further risk/damage?
  - 1.2. Is the area safe to enter?
    - Ensure there is no live electricity; no shelving about to collapse, and that you have adequate personal protective equipment.
  - 1.3. Are records too frail to move to another location i.e. disintegrate with any movement?
    - If yes, can they be salvaged if left in their original packaging?
    - If not, follow procedures related to the recovery method selected.
2. Report to your Manager/Supervisor immediately, who will connect with the Regional Director Quality, Patient Safety & Risk and other individuals as required and determine if this is of a magnitude that cannot be handled internally and outside resources need to be contacted.
3. Assess which records to recover first. Consider:
  - 3.1. Amount of damage and recoverability – has the information been obliterated to the point that it cannot be recovered?
    - If yes, log records on ORG.1410.PL.303.FORM.02 Damaged Records for Destruction Log.
    - If not, follow procedures related to the recovery method selected.
  - 3.2. Have some records reached their retention period?
    - If yes, these records do not need to be recovered and ORG.1410.PL.201 Retention and Destruction of Personal Health Information or ORG.1410.PL.202 Retention of Non-Client Records applies.
    - If not, follow procedures related to the recovery method selected.
  - 3.3. Are these records required as evidence in a litigation case of an outstanding request for information?
    - Assign priority for recovery to these records.
  - 3.4. Are there copies of the records available elsewhere?
    - If yes, focus recovery on records that cannot be reproduced.
    - If no, follow procedures related to the recovery method selected.
4. Plan the recovery.
  - 4.1. Commence with recovery immediately as records deteriorate quickly and water soluble ink continues to run until the document is dried.
  - 4.2. Determine if adequate resources and equipment are available internally i.e. a doublecheck with Maintenance staff, Manager, etc.

- 4.3 Is there a room/area where records can be recovered internally? Is the area secure with good air movement?
    - If not, consider alternative location(s) including off-site.
  - 4.4 Arrange for temporary storage location for any incoming new records that would normally be stored in this area.
    - Determine which records require easy access and store accordingly.
  - 4.5 Do you require off-site options or an external contractor?
    - If external contractors are required, the Regional Privacy & Access Officer will ensure an Information Managers Agreement is signed.
- 5 Document steps taken.
- 5.1 Initiate an Occurrence Report according to ORG.1810.PL.001 Occurrence Reporting and Managing Critical Incidents, Critical Occurrences, Occurrences, and Near Misses.
  - 5.2 Salvageable Records
    - Identify salvageable records, including volume by category on the Occurrence Report.
    - Record methods used to salvage information. Example: spread out to dry with use of fans and dehumidifier.
  - 5.3 Damaged/destroyed Records
    - Identify Records destroyed or best description of records destroyed.
    - Record circumstances of the destruction including who destroyed them, the date they were destroyed, and how they were destroyed on ORG.1410.PL.303.FORM.02 Damaged Records for Destruction Log and attach to the Occurrence Report.
  - 5.4 If records are relocated, complete ORG.1410.PL.303.FORM.03 Location of Records Log and distribute/post as applicable.
- 6 Restoration of records:
- 6.1 Identify the best method of restoration based on options below.
  - 6.2 Replace Absorbent Materials regularly.
  - 6.3 If notes must be made on the documents, use a soft pencil to document on post it notes.

Mould:

1. Monitor for potential mould growth as mould can be a health risk to staff.
2. Mould will weaken and stain paper and begin to grow if records remain wet for 24 hours or more.
3. Mould can be mitigated by limiting humidity to 60% or less and by ensuring appropriate air circulation. High temperatures, high relative humidity, stagnant air and darkness encourage growth of mould.
4. Freezing documents will not kill mould; however, it will place it in a dormant state until the documents can be treated.
5. Rapid drying and proper ventilation are crucial.

Recovery steps for mould found in records:

1. Advise the Infection Control Practitioner at the Site that a record(s) or document(s) has mould.
2. Prior to entering a room with mould, determine which personal protective equipment must be used, i.e. gloves, a gown and a mask; to retrieve charts from the room. When you leave the room, dispose of these items in the garbage provided and perform hand hygiene according to protocol.
3. Determine if the records are too badly contaminated to risk any handling.
4. Do not physically remove records from a contaminated room.
5. If Personal Health Information, photocopy the contaminated document(s) within 48 hours for inclusion in the health record. Place plastic i.e. overhead transparencies, etc. over the glass of the photocopier prior to photocopying. Any photocopying of contaminated records MUST be done within this area.
6. Depending on the circumstances, you may need to photocopy the material and destroy the original.

7. In the absence of an Infection Control Practitioner, the area where the contamination occurred shall be responsible for photocopying the records.
8. Stamp each photocopy with 'COPY'.
9. Complete ORG.1410.PL.303.FORM.01 Notice of Lost/Destroyed/Incomplete Information Form stating why a copy is in the chart.
10. Clean shelving, photocopier and applicable surfaces with disinfectant as directed by Infection Control Practitioner.
  - 10.1 Wash rubber gloves with disinfectant or soap and water before removing them for disposal.
  - 10.2 When you leave the room, dispose of these items in the garbage provided and perform hand hygiene according to protocol.
11. Place mouldy records in a plastic bag and seal. Transport to the nearest incinerator following facility process for disposal of biohazard material or connect with applicable contacts listed below.

Recovery steps for water damaged records:

1. If your facility uses electrical shelving units, determine how shelves can be moved and the records removed without the use of electricity.
2. Move the affected records to a dry location as soon as possible. Even if the water damage is confined to one area of your department, the humidity may still damage the records in another area.
3. Handle damp and/or wet records with utmost care and minimally, as they are very fragile when wet.
4. Do not attempt to separate wet papers that are stuck together.
5. Do not rub affected records with Absorbent Materials as writings may become illegible.
6. Replace all wet boxes, covers, folders with dry ones when possible unless the files will disintegrate from this movement.

Air drying is the preferred method of recovery when:

1. Recovery is within 48 hours of the disaster.
2. There are a reasonable amount of records to recover.
3. Records are damp but not wet.
4. Time, space and staff resources are sufficient.
5. To achieve optimal air circulation, consider:
  - 5.1 A large space to lay records out flat and in small piles.
  - 5.2 Maintain order of records as much as possible.
  - 5.3 Use Absorbent Material (i.e. paper toweling) between wet papers approximately every 5 cm and replace regularly.
  - 5.4 Temperatures (below 21C) and humidity (25-35%) should be kept as low as possible:
    - Increase air conditioning or turn off the heat in the area to reduce temperature and humidity.
    - Do not use heated dryers.
    - Open windows when possible.
    - Use dehumidifiers. When using dehumidifiers, do not open windows.
    - If air conditioning is effective, do not open windows or doors to outside.
  - 5.5 Position fans throughout the area if it is safe to use electricity:
    - Direct cool air from the fans upward rather than directly on the records.

6. Air drying **documents:**

- 6.1 Dry flat in small piles (1 cm high) or individually if possible.
- 6.2 Change Absorbent Material as it becomes soaked.

7. Air drying **books:**

- 7.1 **DO NOT:**
  - Stack drying books on top of each other.
  - Hang books on lines.

- Close wet books that have fallen open.
  - Return books to shelves until thoroughly dried to prevent mould from developing along the gutter margin.
  - Use folded paper towels as pages may become permanently distorted.
- 7.2 When possible, stand books upright on paper towelling with covers open to 90 degrees and pages slightly fanned.
- 7.3 If books cannot be stood on end, interleave with Absorbent Material to about 20% of sections and lay flat, placing it on several sheets of absorbent material:
- Use small card wedges or unprinted, clean, flat paper towels every 20-30 pages to help pages stay open.
  - Do NOT use folded paper towels as pages may become permanently distorted.
  - At a minimum, place Absorbent Material inside the front and back covers.
  - Replace Absorbent Material regularly and alternate pages to ensure rapid drying and to prevent distortion. Invert the volume each time to ensure even drying, preferably every 30 minutes.
- 7.4 When books are dry but still cool to the touch, close and lay flat on a horizontal surface, gently formed into their normal shape.
- 7.5 Books will be at least 20% bigger when dry and bindings may need to be replaced.
8. Air drying **pamphlets**:
- 8.1 Small files and pamphlets may be hung on lines.
9. Air drying **card indexes**:
- 9.1 Remove from drawers.
- 9.2 Stack loosely on sides with support at each end – dish drainers and bookends are options.
10. Air drying **photographs** – preferred method if treated immediately or may be frozen. **DO NOT** freeze dry!
- 10.1 Remove from mounts or separate from each other.
- 10.2 Rinse with cool water if necessary by dipping. **DO NOT** use running water.
- 10.3 **DO NOT** touch or blot surfaces.
- 10.4 Place emulsion side up on blotters or lint free cloths or hang with clips. **DO NOT** overlap.
11. To flatten wrinkles of still damp records:
- 11.1 Separate with silicone or wax paper.
- 11.2 Press between a blotter and boards with a light weight on top.

Freeze Dry when paper has been in direct contact with water (water-spray or standing water) and is wet rather than damp or for large volumes of water damaged records. This method quickly inhibits mould, stabilizes inks and dyes, prevents adhesion of pages and allows time to determine the best options.

1. This method is preferred for paper files, coated paper, and books.
2. Do not freeze dry photographs, including film and negatives, microfilm and electronic media.

Freezing is the alternative and shall be implemented within 3 hours of water exposure to records when water-damaged papers cannot be dried within 48 hours.

1. Clean and dry as much as possible without delaying the freezing.
2. Do not attempt to separate individual records from a soaked pile.
3. Place freezer plastic/paper in between individual records/jackets or every few inches to facilitate thawing and drying.
4. Identify records that contain photographs and ensure they are interleaved with silicon/wax paper.
5. Wrap books/records separately in greaseproof paper to support the document and prevent records from freezing together.

6. To pack wet records/books, place spine down (DO NOT double-stack) or flat in cardboard boxes with interleaves between files:
  - 6.1 Leave spaces at the top of boxes.
  - 6.2 DO NOT pack tightly.
  - 6.3 DO NOT force swelled books closed.
7. Replace all wet boxes, covers, folders with dry ones if possible:
  - 7.1 Some boxes may be intact, DO NOT unpack. Freeze the box with the contents.
8. Transport as soon as possible to a freezer – a self-defrosting kitchen freezer is an option. DO NOT wait for all records to be prepared before beginning the transport process.
9. Identify records per box on a ORG.1410.PL.303.FORM.03 Location of Records Log.
10. Frozen items may be defrosted and treated when thawed.

#### Recovery steps for contaminated records (including rodent/insect infestation)

1. Advise the Infection Control Practitioner at the Site that a record(s) or document(s) have been contaminated. In addition, contact Workplace Safety and Health (WS&H), Environmental Services and Physical Plant if required.
2. Identify the contaminant(s).
3. Take immediate steps to protect the safety and health of any person who may be at risk by assessing the level of danger to staff and the appropriate precautions that need to be taken.
4. Determine the urgency of resolving the contamination to the records. Is time a factor?
  - 4.1 With infestations by insects or rodents, time may not be a factor.
  - 4.2 Together with WS&H determine whether exterminators need to be engaged.
5. Prior to entering a room with contaminated Records, determine which personal protective equipment must be used, i.e. gloves, a gown and a mask; to retrieve charts from the room. When you leave the room, dispose of these items in the garbage provided and perform hand hygiene according to protocol.
6. Determine if the records are too badly contaminated to risk any handling.
7. Do not physically remove records from a contaminated room.
8. Mitigate the risk as applicable:

#### Rodents/insects:

1. Block all openings with durable materials or heavy wire mesh so that rodents/insects cannot continue to access the area. Take note of door jams, gaps and cracks in the foundation.
2. Ventilate the space by opening the doors and windows for at least 30 minutes to allow fresh air to enter the area if required. Use cross-ventilation and leave the area during the airing-out period.
3. Do **not** stir up dust by sweeping or vacuuming up droppings, urine, or nesting materials
4. Clean up dead rodents and/or nest:
  - 4.1 Pour a disinfectant solution (such as 1 part bleach to 10 parts water) carefully onto the area to avoid disturbing any virus present. It is important that you do not use a sprayer.
  - 4.2 Soak rodent, nesting materials or droppings and the surrounding area at least 5 minutes before wiping up with a paper towel or rag. When using a commercial disinfectant, follow the manufacturer's instructions on the label for dilution and disinfection time.
  - 4.3 Use a paper towel/rag to pick up the contaminants and place in a plastic garbage bag and seal tightly.
  - 4.4 Place into a second plastic garbage bag and seal again.
  - 4.5 Transport to the nearest incinerator following facility process for disposal.
5. If Personal Health Information, photocopy the contaminated document(s) within 48 hours for inclusion in the health record. Place plastic i.e. overhead transparencies, etc. over the glass of the photocopier prior to photocopying. Any photocopying of contaminated records MUST be done within this area.
6. Depending on the circumstances, you may need to photocopy the material and destroy the original.
7. In the absence of an Infection Control Practitioner, the area where the contamination occurred shall be responsible for photocopying the records.
8. Stamp each photocopy with 'COPY'.
9. Complete ORG.1410.PL.303.FORM.01 Notice of Lost/Destroyed/Incomplete Information Form stating why a copy is in the chart.

10. Clean shelving, photocopier and applicable surfaces with disinfectant as directed by Infection Control Practitioner.
  - 10.1 Wash rubber gloves with disinfectant or soap and water before removing them for disposal.
  - 10.2 When you leave the room, dispose of these items in the garbage provided and perform hand hygiene according to protocol.
11. Place contaminated records in a plastic bag and seal. Transport to the nearest incinerator following facility process for disposal of biohazard material or connect with applicable contacts listed below.

**Additional Precautions – Protecting Documents requiring a client’s signature:**

Contaminated records may include documents with blood or another unknown substance on it, and/or when a document is inadvertently taken to the room of a client in isolation.

In a health care setting, when the client is known to have an Antiboitic Resistant Organism (ARO), DO NOT take the record into the client’s room.

1. If a form requires the client’s signature:
  - Wipe the table.
  - Have the client clean their hands and then sign.
  - Wipe or discard the pen used.
2. If the document has become contaminated and before placing into the health Record:
  - Print ‘CONTAMINATED’ on the top of each contaminated page.
  - Place each contaminated page in its own protective cover (plastic sleeve).
  - Tape the open end of the protective cover, completely sealing the page.
  - Place the protected, sealed, contaminated page in the health Record.

**Recovery steps for fire-damaged records: Generally, water damage must also to be considered.**

1. Identify salvageable records:
  - Some records may not show signs of damage; however, high temperatures can cause them to become very brittle.
2. Remove wet waste from the area to decrease humidity.
3. Salvage wet records without fire damage first as outlined in ***Recovery steps for water damaged records*** above.
4. Salvage fire damaged records:
  - To remove soot/debris - use a soft brush, special latex (dry) sponges, and/or roll a piece of kneadable eraser cross the surface. DO NOT use these methods on charred records.
  - Avoid flexing documents even after dried.
  - To clean a book, close it tightly, wiping (gentle stroking motion) in one direction away from the spine.
5. Document records for disposal - completely burned, charred, embrittled - records that are beyond repair on ORG.1410.PL.303.FORM.02 Damaged Records for Destruction Log.
6. As records start to dry, individual pages can be separated:
  - Work from the least burnt edge using a blunt knife to lift the edge along its length.
  - Gently pull it back and lay it over the roll of your paper towel.
  - Once the page is free, lay it flat on Absorbant Material to dry completely, replacing paper as required.
7. Place fire damaged documents in individual sleeves to avoid further damage.
8. Create copies of the documents that are required long term by photocopying, scanning, or take photos with a camera.
9. If Personal Health Information, photocopy the fire damaged document(s) within 48 hours for inclusion in the health Record. Place plastic i.e. overhead transparencies, etc. over the glass of the photocopier prior to photocopying. Ensure to protect the photocopier from getting wet/contaminated.
10. Stamp each photocopy with ‘COPY’.

11. Complete ORG.1410.PL.303.FORM.01 Notice of Lost/Destroyed/Incomplete Information Form stating why a copy is in the chart.
12. Place record(s) in a plastic bag and seal. Transport to the nearest incinerator following facility process for disposal of biohazard material or connect with contacts in list below.

**Recovery for destroyed, lost, or stolen records:**

For Personal Health Information:

1. When available, access an electronic system i.e. the Admission/Discharge/Transfer (ADT), ARIA Cancer Care MB system, etc., to determine access dates and visits.
2. Reprint or upload documents from databases such as ADT, eChart, transcription, laboratory, radiology, etc. or data back-up services.
3. Re-transcribe or reprint documents from the dictation and transcription systems if required and if available.
4. Obtain copies from recipients of previously distributed reports i.e. physician clinics, other hospitals, the business office.
5. If unable to reconstruct part or all of the record, start a new record:
  - 5.1 Document the date, what information was lost/destroyed, when and how it was destroyed, and the recovery process on ORG.1410.PL.303.FORM.01 Notice of Lost/Destroyed/Incomplete Information Form.
  - 5.2 Applicable Manager(s) in consultation with the Regional Director Quality, Patient Safety, and Risk, will notify all clients whose records were destroyed including the date and circumstances.
6. If a current care record is missing and you are unable to reconstruct the record, when possible, request that:
  - 6.1 Staff complete assessments and a new care plan
  - 6.2 Health Care Providers involved in the care, write a summary note of the client's history and progress.
  - 6.3 Verify physician orders with attending physician(s) and request they sign the reconstructed orders.
7. In response to requests for disclosure of Personal and/or Personal Health Information that would have normally included the missing portion, include a copy of the ORG.1410.PL.303.FORM.01 Notice of Lost/Destroyed/Incomplete Information Form documenting the loss of that information.

For non-client records:

1. Obtain copies from recipients of previously distributed reports.
2. If unable to reconstruct part or all of the record, start a new record:
  - 2.1 Document the date, what information was lost/destroyed, when and how it was lost/destroyed, and the recovery process on ORG.1410.PL.303.FORM.01 Notice of Lost/Destroyed/Incomplete Information Form.
3. In response to requests for disclosure that would have normally included the missing portion, include a copy of the ORG.1410.PL.303.FORM.01 Notice of Lost/Destroyed/Incomplete Information Form documenting the loss of that information.

**POST EVENT:**

1. Evaluate the situation to determine the source of the incident or disaster.
2. Identify measures to mitigate risk in the future.
3. Implement preventative steps to minimize repeat occurrences such as, but not limited to:
  - To prevent flood damage, place records on shelving at least 3 inches off the ground
  - Appropriate storage units to avoid infestations by insects or rodents.
4. Meet with staff to evaluate departmental performance and identify opportunities for improvement.
5. Complete the Occurrence Reporting process as per ORG.1810.PL.001 Occurrence Reporting and Managing Critical Incidents, Critical Occurrences, Occurrences and Near Misses.



**POSSIBLE SUPPLIES LIST:**

|   |                             |
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| 1. Absorbent Material (i.e. paper toweling) | 13. Photocopier             |
| 2. Camera                                   | 14. Plastic gloves          |
| 3. Dehumidifiers                            | 15. Post it notes           |
| 4. Dust masks                               | 16. Rubber boots            |
| 5. Emergency lighting                       | 17. Scissors                |
| 6. Fans                                     | 18. Silicone or wax paper   |
| 7. First Aid kit                            | 19. Sponge                  |
| 8. Freezer plastic bags/paper               | 20. Tags/ties               |
| 9. Indelible marker pen/freezer marker      | 21. Towels                  |
| 10. Garbage bags                            | 22. Utility knife           |
| 11. Mops and buckets                        | 23. Waterproof masking tape |
| 12. Pencil                                  | 24. Wet/dry vacuum cleaners |

**CONTACTS:**

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| For advice regarding salvage and restoration and/or destruction of damaged/contaminated records contact: |   |
| Southern Health-Santé Sud  | Regional Manager Physical Plant and/or Regional Manager Environmental Services  |
| Archives of MB Preservation Services office  | 130-200 Vaughan Street, Winnipeg, MB 204-945-1265   |
| Iron Mountain Document Recovery Services   | 1500 Clarence Avenue, Winnipeg, MB 855-277-8577   |
| Freeze Drying and Restoration  | Winnipeg Furniture Building/Furniture Services (Contact Dave McAngus)   |
| Vacuum Freeze Drying:  | Steamatic of Winnipeg <a href="http://steamatic-of-winnipegpriority-restoration.manitoba.xcanada.ca/map.aspx">http://steamatic-of-winnipegpriority-restoration.manitoba.xcanada.ca/map.aspx</a> |
| Refer to websites and/or Yellow Pages  |   |

**SUPPORTING DOCUMENTS:**

- [ORG.1410.PL.303.FORM.01](#) Notice of Lost/Destroyed/Incomplete Information Form
- [ORG.1410.PL.303.FORM.02](#) Damaged Records for Destruction Log
- [ORG.1410.PL.303.FORM.03](#) Location of Records Log
- [ORG.1411.PL.502.SD.01](#) PHIA Definitions

**REFERENCES:**

- The Personal Health Information Act
- AHIMA *Physical Security of Manual or Paper Records* 2011
- Alberta Health Records Management Committee ARMC Circular 2013-04
- CHIMA *Disaster Planning for Health Information Services* Professional Practice Brief
- MB Preservation Services office - 2014
- NSW Government - South Eastern Sydney Local Health District *Health Records Disaster Management Policy – August 2012*
- National Archives of Australia *Recovering flood-damaged records* 2014
- National Archives and Records Administration at College Park MD - August 1993
- Conservation Center for Art and Historic Artifacts (CCAHA) *Freezing and Drying of Book, Paper and Photographic Materials.*
- Covery's Risk Management *Recovery Efforts for Water-Damaged Medical Records*, 2012
- State University of New York, Stony Brook *Emergency Response Manual* January 2010
- Centers for Disease Control and Preventions August 2012