Unexpected Record Damage: Protecting Your Records From Water Hazards

James W. Echard, Jr., BS, AAS — Police Science and Law Enforcement, AAS — Fire Science, HEM

Accidents, severe weather, and natural disasters can result in extensive water damage to important documents, such as medical/dental records and X-ray films. For example, hurricanes, heavy rains, broken water pipes, or even an overflowing floor drain can cause unexpected damage to stored records in a basement or storage room. Water damage also can be an unanticipated side effect of fire-fighting efforts.

When a medical or dental practice faces a loss such as water-damaged records and X-ray films, certain steps should be taken. First, report the loss to your insurance carriers (general liability and property). Next, check the records to determine the extent of the damage.

Are the records/films completely destroyed, or are some of them only partially destroyed? Could the records potentially be restored? The extent of the damage will determine next steps.

Partially Destroyed Records

Moisture in any form and paper don’t mix; when exposed to water, paper begins to deteriorate. The same deterioration occurs with X-ray film jackets, but the process is slower. Moisture infiltrates the paper’s cell structure, followed by swelling and discoloration. This creates an environment that will permit the growth of mold and bacteria on the surface of the paper or X-ray film jackets. The growth of mold and bacteria can occur in a domino-like effect, spreading from folder to folder.

Water-damaged medical records and X-ray films can potentially be restored. Although the complete restoration of water-soaked documents often is expensive, it might be wise to attempt to salvage them. However, this process has to begin as quickly as possible because of deterioration.

In warm weather, mold growth might appear within 48 hours. Mold also can be expected to appear in poorly ventilated areas within the same timeframe. Therefore, reducing high humidity and temperature and venting the areas as soon as feasible is imperative. Water-soaked material must be kept as cool as possible with good air circulation. Failure to do so could lead to a higher recovery/restoration cost.
As soon as possible, seek the services of a restoration company to restore your practice’s damaged records. Because the restoration company will be working with patient information, you will need to have a HIPAA business associate agreement (BAA) with them. (To learn more about HIPAA BAAs, visit http://www.hhs.gov/ocr/privacy/hipaa/understanding/coveredentities/contractprov.html.)

The restoration company will place the materials into commercial freezers. Once frozen, the materials are moved to a freeze-drying chamber. Air within the freeze-drying chamber is removed through a vacuum process, and the temperature is lowered.

The moisture within the materials is converted to a vapor state and then taken out of the chamber. The temperature within the freeze-drying chamber is gradually increased over time, and any residual moisture is removed.

Freezing, followed by vacuum freeze drying, is one of the most effective methods of removing water from paper records and X-ray films. This method has been used in the recovery of books, manuscripts, leather, maps, historical and collectible items, and textiles.

If water damage has resulted from fire-fighting measures, cooperation with the fire marshal and health and safety officials is vital for a realistic appraisal of the feasibility of a safe salvage effort. Fire officers will decide when a building is safe to enter. In these instances, salvage operations are planned so that the environment of water-damaged areas can be stabilized and controlled both before and during the removal of the records and films.

**Completely Destroyed Records**

When records are completely destroyed, the challenge to the practice will be twofold. First, the destroyed records will need appropriate disposal. Second, new records will have to be constructed from information the practice can assemble.

Damaged records must be completely destroyed to protect patient confidentiality and comply with HIPAA regulations. Dry the records and then shred them if possible. No intact record or X-ray may be discarded. As noted previously, be aware of the likelihood that mold will develop, and try to keep the area where records are stored cool and dry.

When ready to destroy the records, the practice should keep a log of all records that are destroyed, as is done with planned record destruction. This log should include the following information:

- Name
- Date of birth
- Social security number
- Dates of first and last visit
• General problems, and procedures performed in the office
• Documentation of what was destroyed, how it was destroyed, and the date of destruction

Reconstructing records can be done by pulling together information from other systems and files available to the practice. The practice also should send notification letters to patients whose records were damaged to make them aware of the situation.

In the letters, the practice can enclose a medical/dental history form and request that each patient complete the form to the best of his or her ability. A copy of the notification letter should be filed in the patient’s reconstructed medical/dental record.

Once each chart is rebuilt, it should include clear documentation explaining that it was reconstructed. This documentation should include at least the following:

• The date the chart was reconstructed
• The reason for reconstruction
• Sources of information for reconstruction
• Efforts made to obtain other information (if applicable)
• A statement that, due to reconstruction, the information contained in the chart as of the reconstruction date is considered inexact

Medicare and other insurance carriers may expect to be notified that patient records have been lost. These organizations expect the practice to provide medical record documentation to support patient claims. If a medical record is destroyed, they may want the practice to sign a form that attests to the unexpected loss of the record.

**Prevention**

Addressing potential water damage might not seem like an urgent priority. However, without appropriate precautions, important records, X-ray films, and other materials might be compromised or completely destroyed.

In an effort to prevent water damage, consider whether your office is at risk of flooding. For example, ask your local emergency management agency if your office is located in a known floodplain. Determine the elevation of your office in relation to local rivers, creeks, bays, and the ocean.

Further, it is appropriate to evaluate your storage space at least twice a year, though a quarterly examination would be even better. More frequent inspections are appropriate when weather is unusually harsh, no matter the season. Weather extremes expose the vulnerabilities of buildings much more quickly.

Routine prevention steps include storing records at the highest level possible inside the office and stacking records and X-rays off the floor. Use shelving units, if possible, and
position them as high off the floor as you can. Keep in mind, however, that storing records too high can pose a potential injury concern for staff. A sturdy step stool might be needed to safely access these records.

Plastic tarps can be placed in rolls over the stored records and then unrolled when a storm approaches to protect against rain and roof damage. Additionally, take any paper out of the lower drawers of your desks and file cabinets and place them in plastic bags or plastic containers that can be placed on top of the units. Also, if you know a severe storm is coming, take time to pull lower boxes out of the basement.

Physicians and dentists who maintain paper records also should consider storing copies of their administrative records (financial, insurance, patient scheduling, patient lists) offsite in a secure area.

Finally, develop a system of routine record destruction so that you keep only the records you are supposed to keep. This will limit the clutter in your storage area and reduce the number of records exposed to the risk of water damage. For more information and guidance about record retention, contact your MedPro Group patient safety and risk consultant.

**Conclusion**

In summary, each office practice should (a) implement prevention strategies to safeguard medical/dental records and X-ray films, and (b) consider document restoration as part of emergency preparedness and disaster planning. For additional helpful resources, visit: [http://www.archives.gov/preservation/disaster-response/salvage-procedures.html](http://www.archives.gov/preservation/disaster-response/salvage-procedures.html).

---

This document should not be construed as medical or legal advice. Because the facts applicable to your situation may vary, or the laws applicable in your jurisdiction may differ, please contact your attorney or other professional advisors if you have any questions related to your legal or medical obligations or rights, state or federal laws, contract interpretation, or other legal questions.

MedPro Group is the marketing name used to refer to the insurance operations of The Medical Protective Company, Princeton Insurance Company, PLICO Inc., and MedPro RRG Risk Retention Group. All insurance products are underwritten and administered by these and other Berkshire Hathaway affiliates. Product availability is based upon business and regulatory approval and may differ between companies.

© MedPro Group. All rights reserved.