Pharmacists at all levels in the health care system were involved in the response to hurricane Katrina that struck the southern US in August 2005.

Marianne Billeter, clinical pharmacist, Ochsner Clinic Foundation Hospital, New Orleans, was a member of the hospital’s hurricane team and her primary role was to run the pharmacy services during the emergency period. When the hurricane warning was received the emergency plan was put into operation. The day before the hurricane was spent in preparation and a key step was switching staff to 12 hour shifts so that the pharmacy could run with fewer staff than usual.

When the hurricane struck on Monday 29 August, mains power was lost. Two of the three emergency generators soon broke down leaving the pharmacy unable to operate either a vertical carousel drug storage unit or the laminar air flow cabinet that is used to make total parenteral nutrition. The cabinet was moved to a surgical theatre. Loss of air conditioning in the pharmacy meant that computer servers could no longer be cooled and by 9pm all the pharmacy computers were out of operation, and a manual system was introduced for the next four days. The Ochsner Clinic was the only hospital in the area. Supplies of medicines were short and water. The pharmacy’s role in preparing for and managing in emergencies

The role of pharmacy in emergency preparedness was among the issues discussed at this year’s ASHP midyear meeting, including the response to hurricane Katrina and preparing for a possible chemical attack. Hannah Pike, Christine Clark and Laurence Goldberg report

The American Society of Health-System Pharmacists mid-year clinical meeting was held in Las Vegas, Nevada on 4–8 December 2005.

Hannah Pike is editor of Hospital Pharmacist, Christine Clark is a freelance journalist and Laurence Goldberg is a consultant pharmacist.
Preparing hospitals for a nerve agent attack

In the event of a chemical attack the responsibilities of pharmacy will include direct delivery of medicines to the emergency department in the hospital, indirect delivery of supplies to the scene of the incident, and help with diagnosis by symptom recognition.

Colleen Terriff, clinical assistant professor at Washington State University College of Pharmacy, described the US government’s contingency plans in case of nerve agent terrorism, and the role that pharmacists have to play in both executing and maintaining the programme.

The CHEMPACK programme consists of a federal stockpile of nerve agent antidotes that are stored locally under tightly controlled conditions. The programme was officially launched in April 2004 following a year-long pilot in Washington, New York City and South Dakota. All states and US territories are now being offered this programme, and most health-systems are either directly or indirectly involved in it. “The programme, and most health-systems are either directly or indirectly involved in it.”

The CHEMPACK is stored in a secure wire cage after installation. Observation technique involved trained nurses who are not using the system correctly. A review of the patients record was performed to reconcile medicines administered with those prescribed.

After installation of the technology, a 54 per cent reduction in medication errors was observed (P=0.045). The direct observation accuracy rate was 86.5 per cent before installation of BPOC technology, and 97 per cent after installation.

The team conclude that the combination of an EMAR and BPOC system achieve better patient care by enhancing medicine safety. The team, who presented their work during the opening general session of the meeting, says: “The true impact of this initiative will continue to be measured for years to come as more initiatives and procedures are created in response to the data gleaned from using this system.”

Barcode technology reduces medicine administration errors

Use of barcode technology reduces medicine administration errors in an acute care hospital. This is the finding of a team from Lancaster General Hospital, Pennsylvania, who received an American Society of Health-System Pharmacists Best Practice Award, sponsored by Pfizer, for their work.

A direct observation technique was used to record frequency of medicine administration errors before and after installation of an electronic medication administration record (EMAR) and barcode point-of-care (BPOC) system to a nursing unit in the hospital. The observation technique involved trained observers watching the nurses administer medicines, from the time the medicine was dispensed from an automated cupboard to the time the medicine was administered. The

Barcode technology reduces medicine administration errors

Use of barcode technology reduces medicine administration errors in an acute care hospital. This is the finding of a team from Lancaster General Hospital, Pennsylvania, who received an American Society of Health-System Pharmacists Best Practice Award, sponsored by Pfizer, for their work.

A direct observation technique was used to record frequency of medicine administration errors before and after installation of an electronic medication administration record (EMAR) and barcode point-of-care (BPOC) system to a nursing unit in the hospital. The observation technique involved trained observers watching the nurses administer medicines, from the time the medicine was dispensed from an automated cupboard to the time the medicine was administered. The

Barcode technology reduces medicine administration errors

Use of barcode technology reduces medicine administration errors in an acute care hospital. This is the finding of a team from Lancaster General Hospital, Pennsylvania, who received an American Society of Health-System Pharmacists Best Practice Award, sponsored by Pfizer, for their work.

A direct observation technique was used to record frequency of medicine administration errors before and after installation of an electronic medication administration record (EMAR) and barcode point-of-care (BPOC) system to a nursing unit in the hospital. The observation technique involved trained observers watching the nurses administer medicines, from the time the medicine was dispensed from an automated cupboard to the time the medicine was administered. The

Barcode technology reduces medicine administration errors

Use of barcode technology reduces medicine administration errors in an acute care hospital. This is the finding of a team from Lancaster General Hospital, Pennsylvania, who received an American Society of Health-System Pharmacists Best Practice Award, sponsored by Pfizer, for their work.

A direct observation technique was used to record frequency of medicine administration errors before and after installation of an electronic medication administration record (EMAR) and barcode point-of-care (BPOC) system to a nursing unit in the hospital. The observation technique involved trained observers watching the nurses administer medicines, from the time the medicine was dispensed from an automated cupboard to the time the medicine was administered. The

Barcode technology reduces medicine administration errors

Use of barcode technology reduces medicine administration errors in an acute care hospital. This is the finding of a team from Lancaster General Hospital, Pennsylvania, who received an American Society of Health-System Pharmacists Best Practice Award, sponsored by Pfizer, for their work.

A direct observation technique was used to record frequency of medicine administration errors before and after installation of an electronic medication administration record (EMAR) and barcode point-of-care (BPOC) system to a nursing unit in the hospital. The observation technique involved trained observers watching the nurses administer medicines, from the time the medicine was dispensed from an automated cupboard to the time the medicine was administered. The

Barcode technology reduces medicine administration errors

Use of barcode technology reduces medicine administration errors in an acute care hospital. This is the finding of a team from Lancaster General Hospital, Pennsylvania, who received an American Society of Health-System Pharmacists Best Practice Award, sponsored by Pfizer, for their work.

A direct observation technique was used to record frequency of medicine administration errors before and after installation of an electronic medication administration record (EMAR) and barcode point-of-care (BPOC) system to a nursing unit in the hospital. The observation technique involved trained observers watching the nurses administer medicines, from the time the medicine was dispensed from an automated cupboard to the time the medicine was administered. The

Barcode technology reduces medicine administration errors

Use of barcode technology reduces medicine administration errors in an acute care hospital. This is the finding of a team from Lancaster General Hospital, Pennsylvania, who received an American Society of Health-System Pharmacists Best Practice Award, sponsored by Pfizer, for their work.

A direct observation technique was used to record frequency of medicine administration errors before and after installation of an electronic medication administration record (EMAR) and barcode point-of-care (BPOC) system to a nursing unit in the hospital. The observation technique involved trained observers watching the nurses administer medicines, from the time the medicine was dispensed from an automated cupboard to the time the medicine was administered. The
Assessing quality of work life in hospital pharmacy

Employers need a better understanding of the factors that influence work attitudes in health-system pharmacies, according to US researchers.

David Mott, associate professor, social and administrative pharmacy at the University of Wisconsin, Madison, said that there is a need to focus on the tools used to measure quality of work life and job satisfaction. “We have broad measures of things like job satisfaction and I think we need to focus on developing measures that pertain specifically to pharmacy and what pharmacists do,” he said. If the measures used were more specific to the environment that health-system pharmacists work in, managers would have a better idea of what their workforces are reacting to, both positively and negatively, he said.

Joseph Bonnarens, assistant professor, social and administrative pharmacy at the same university, said that although it is critical for employers to understand the impact of quality of work life in today’s market place, there has not been a lot of research performed on the area. He agreed that setting-specific measures need to be developed to address unique environmental factors that apply to pharmacists, and said that these measures need to be kept up to date in a rapidly changing environment.

Dr Bonnarens described how his team recently conducted a literature review searching for pharmacy job satisfaction articles, and found 34 articles published since the 1970s with the majority being published in the 1980s. Only three articles had been published since 2000. The team found no tools to measure satisfaction that were specific to a job in pharmacy. He acknowledged difficulties in creating such a tool, including the difficulty in categorising hospital pharmacy employees as there are many positions and a variety of titles.

New ASHP guidelines on handling hazardous drugs

New guidelines on the handling of hazardous drugs have been drawn up by the ASHP. Describing the new document, Luci Ard, associate professor, social and administrative pharmacy at the University of California Medical Centre, San Francisco, said that it reflected the advances that had been made in this field over the past 15 years and the guidance given by other bodies. It replaces the ASHP 1990 Technical Assistance Bulletin on handling cytotoxic and hazardous drugs.

In the new document, the list of workers who could be affected by hazardous drugs has been increased to include people involved in the distribution and receipt of drugs as well as those who are involved in cleaning and waste handling.

Considerable attention has been given to ensuring that hazardous drugs are compounded and administered in appropriate environments. Numerous work practice control recommendations have been made to minimise contamination and maximise containment. In particular, the guidelines recognise that the exterior of many containers can be a source of contamination. For this reason they recommend wiping down of the exterior before a product is put into the cabinet and before the finished product is taken out of the cabinet.

The question of which agent to use for wiping down is still unresolved. Alcohol can be used as a disinfectant but it will not deactivate any hazardous drugs. Dr Power recommended using a specific deactivator if available.

The guidelines also contain a number of recommendations on personal protective equipment. Gloves should ideally be made of material other than latex and must meet the American Society for Testing and Materials standard for resistance to permeation by chemotherapy drugs. Double-gloving is recommended for all tasks, and gowns coated with polyethylene or vinyl should be worn when handling hazardous drugs. Those used during preparation must be changed hourly and discarded.

The use of isolators does not necessarily eliminate the need for gowns, noted Dr Power. Operators could still be exposed to hazardous drugs when handling the vials and the final product. Eye, face and respiratory protection is needed in some circumstances. Surgical masks do not provide respiratory protection, she emphasised.

Finally, medical surveillance must be the safety programme for all workers handling hazardous drugs. At risk workers, such as women in the first trimester of pregnancy, must be offered alternative duties.

The guidelines will be published in the American Journal of Health-System Pharmacy early this year.

Changes to anticonvulsant drugs not always documented

Although any changes to patients’ anticonvulsant drugs should be planned under careful medical supervision, unplanned changes do occur. Helen Badham, resident pharmacist at the Royal Hallamshire Hospital, Sheffield, presented the results of an audit on seizure control therapy.

On reviewing the drug history, drug chart and medical notes of 68 patients, Miss Badham analysed any discrepancies found between the patients’ drug history and the anticonvulsant drugs currently prescribed.

In 42 cases (65 per cent) there was a difference between the drug history and the anti-convulsant therapy prescribed. Of these, 77 per cent had a documented clinical reason for the change, 11 per cent had a documented formulation change, and 12 per cent did not have the reason documented. Of these, 6 per cent were already being investigated by a pharmacist, and 6 per cent were unknown.

The audit has been presented to the multidisciplinary epilepsy team at the hospital, where it was decided to review drug history collection skills as part of the junior doctor induction programme.