

Dealing with office emergencies

Stepwise approach for family physicians

Ian P. Sempowski, MD, CCFP(EM) Robert J. Brison, MD, MPH, FRCP

ABSTRACT

OBJECTIVE To develop a simple stepwise approach to initial management of emergencies in family physicians' offices; to review how to prepare health care teams and equipment; and to illustrate a general approach to three of the most common office emergencies.

QUALITY OF EVIDENCE MEDLINE was searched from January 1980 to December 2001. Articles were selected based on their clinical relevance, quality of evidence, and date of publication. We reviewed American family medicine, pediatric, dental, and dermatologic articles, but found that the area has not been well studied from a Canadian family medicine perspective. Consensus statements by specialty professional groups were used to identify accepted emergency medical treatments.

MAIN MESSAGE Family medicine offices are frequently poorly equipped and inadequately prepared to deal with emergencies. Straightforward emergency response plans can be designed and tailored to an office's risk profile. A systematic team approach and effective use of skills, support staff, and equipment is important. The general approach can be modified for specific patients or conditions.

CONCLUSION Family physicians can plan ahead and use a team approach to develop a simple stepwise response to emergency situations in the office.

RÉSUMÉ

OBJECTIF Développer une démarche simple permettant la prise en charge initiale des urgences dans les cabinets de médecine familiale; décrire l'équipement requis et la façon de préparer le personnel; illustrer cette démarche en l'appliquant à trois types d'urgences fréquemment rencontrées au cabinet.

QUALITÉ DES DONNÉES Une recherche a été effectuée dans MEDLINE entre janvier 1980 et décembre 2001. Les articles ont été choisis en fonction de leur intérêt clinique, de la qualité des données et de leur date de publication. Les articles d'origine américaine revus en médecine familiale, en pédiatrie, en médecine dentaire et en dermatologie ne traitaient pas ce domaine conformément à la médecine familiale pratiquée au Canada. Les traitements médicaux d'urgence «acceptables» ont été établis à partir des déclarations consensuelles de certains groupes de spécialistes.

PRINCIPAL MESSAGE Les cabinets de médecine familiale n'ont souvent pas la préparation ni l'équipement qu'il faut pour faire face aux urgences. Cette lacune peut être corrigée par l'instauration de mesures simples qui tiennent compte du profil de risque propre à chaque cabinet. Une approche d'équipe et l'utilisation efficace des habiletés professionnelles, du soutien du personnel et d'un bon équipement sont des éléments importants. Ces mesures générales peuvent être modifiées en fonction du type de clientèle et des conditions particulières de pratique.

CONCLUSION Le médecin de famille est en mesure de développer une démarche simple permettant à l'équipe soignante de répondre adéquatement aux situations d'urgence qui se présentent au cabinet.

This article has been peer reviewed.

Cet article a fait l'objet d'une évaluation externe.

Can Fam Physician 2002;48:1464-1472.

Family physicians are on the front lines of health care and can be required to manage office-based emergencies varying from psychotic patients to cases of severe anaphylaxis. This article reviews existing literature on managing office emergencies and describes how a simple stepwise management plan can be applied to three common office emergencies.

A survey of family physicians in the United States in 1985 showed that more than 40% of respondents had encountered each of eight different emergencies. Only 11% had had all the equipment required to deal with these emergencies.¹ A study of pediatricians and family physicians showed that more than 80% had encountered an emergency in the preceding 3 months but that, in most cases, staff were unprepared and ill-equipped to cope with it.² This apparent lack of preparedness has been attributed to the perception that emergencies are rare, physicians are too busy to prepare, the cost of preparing for emergencies is prohibitive, and hospitals are close by.³⁻⁵

Quality of evidence

MEDLINE was searched from January 1980 to December 2001. Articles were selected based on their clinical relevance, quality of evidence, and date of publication. Most articles were published in the pediatric, dental, and dermatologic literature. There were relatively few Canadian family medicine research studies on managing office emergencies; the articles we found were primarily case-control studies and cross-sectional surveys. As a result, many of our conclusions and recommendations stem from consensus statements published by professional organizations, reputable textbooks, or expert opinion.

Emergencies do happen

The first step for family physicians is to develop an awareness that emergencies can and do occur and that being prepared for them requires an investment of time, effort, and money. Organization and planning are important for preventing chaotic emergency responses. Offices should use all their staff effectively and have a proactive team approach. A simple task-based, sequential plan can be developed; the plan can be put into effect by a two-person team or an office full of staff. Tasks

.....
Dr Sempowski is an Assistant Professor in the Department of Family Medicine, and **Dr Brison** is a Professor and Research Director in the Department of Emergency Medicine, at Queen's University in Kingston, Ont.

can be divided into communication and medical response categories (**Figure 1**⁶⁻⁸).

Preparing office staff

Reasons to prepare. Physicians should presume they will at some time be exposed to an urgent situation.^{1,2} Advance preparation allows office staff to provide rapid, efficient medical care. Anxiety, panic, and negative effects on other patients can be minimized if staff members know their roles and are able to execute them as planned.⁹

Risk profile. Offices can be classified on the basis of their likelihood of having an emergency and the risk of the emergency having an adverse outcome. Our classification is necessarily based on consensus and expert opinion because there is little research in this area.

Low-risk offices have the following characteristics:

- low volume of patients,
- urban location,
- close to an emergency room,
- few "sick" patients,
- limited scope of practice (eg, only psychotherapy),
- no parenteral medications given, and
- no procedures done in the office.

Moderate-risk and high-risk offices range in risk according to how many of the following characteristics they have:

- rural or remote location;
- no local hospital;
- invasive procedures done in office;
- parenteral medications frequently given;
- no access to emergency medical services (EMS) or delay in EMS response;
- high-risk procedures done in office (eg, stress testing);
- high-volume, large-group practice; and
- possible exposure to severe weather.^{10,11}

Walk-in clinics could be at increased risk from high exposure to acute illness, a transient physician population, and other characteristics. Most family physicians work in offices that fall into the moderate-risk classification.

Organizing the team. The health care team should meet briefly to discuss skill levels and roles of group members. Skills in cardiopulmonary resuscitation (CPR) and management of airways (bag-valve mask) and intravenous catheters, and knowledge of medication administration should be noted and upgraded as needed. All clinical staff should be trained in basic life support techniques.^{4,5,11} Non-clinical staff can be involved in many aspects of emergency response. Physicians, nurses,

Figure 1. Stepwise approach to office emergencies

COMMUNICATIONS		MEDICAL RESPONSE
1. Call 911 and alert emergency medical services (EMS)	TRIAGE PHASE	1. Check airway, breathing, circulation 2. Triage after a brief history and physical examination 3. Verify diagnosis 4. Assess severity 5. Maintain a safe environment
2. Establish leadership and direct activities 3. Obtain immediate assistance within the office 4. Start a flowsheet 5. Obtain history from family, and update family on situation 6. Communicate with and relocate other patients as needed 7. Obtain old chart, gather information	MANAGEMENT PHASE	6. Obtain required equipment 7. Move patient as required 8. Do a secondary survey 9. Do additional investigations 10. Assess need for immediate treatment 11. Initiate treatment <ul style="list-style-type: none"> • Oxygen • Intravenous line • Medications 12. Reevaluate status and response to therapy
8. Direct EMS team in parking lot, elevator, etc 9. Call hospital emergency room 10. Sign over to EMS 11. Gather written transfer materials, copy of flowsheet, summary, etc	TRANSFER PHASE	13. Transfer for definitive care
12. Debrief team immediately 13. Hold delayed team meeting and debriefing	FOLLOW UP AND DEBRIEFING	

Based on Hodge,⁶ Fader and Johnson,⁷ and Sapien and Hodge.⁸

and non-clinical staff should all have readily identifiable tasks for managing emergencies.

The team should meet briefly from time to time to verify the location and content of supplies and review assigned tasks. They should also meet after emergencies to debrief and revise the management plan.

Equipment and supplies

One of three levels of emergency equipment is required depending on your office’s risk profile (Table 1^{5,6,12-15}). The recommendations we offer are largely based on consensus and expert opinion, much of which arises from American literature. When setting up your office, it might be wise to consult with your provincial licensing body regarding their recommendations. Recommendations often reflect a bare minimum standard of equipment and do not take into account the full spectrum of risk. The Canadian Medical Protective Association does not provide any recommendations because it is not its mandate to set a standard of care.

Equipment recommended for moderate-risk offices meets the requirements for typical family physicians’ offices. Rural or remote offices should have some or all of the components recommended

for high-risk offices.^{5,6,12-14} Offices that do obstetrics or have large neonatal practices should consider their additional requirements.

Automatic electronic defibrillators (AEDs) are not prevalent in Canadian family physicians’ offices despite the fact that time to defibrillation has been shown to be the only significant parameter in survival following cardiac arrest. The critical time interval is 6 to 8 minutes, and every minute less translates into a 0.7% to 2.1% increase in survival.^{15,16} In areas where EMS response is prolonged, the benefit of an AED might justify the cost, although additional research is needed to confirm this.^{7,15}

It should be made clear that these recommendations are based on an ideal model of care and do not reflect the current standard of practice in physicians’ offices. One step toward correcting this deficiency would be for professional or government bodies to produce office emergency kits for each level of risk on a “not for profit” or even subsidized basis. An advantage to such standardization would be that locums and walk-in clinic physicians would all know the contents of standard emergency bags and how they are organized. In the United States, multispecialty groups and health maintenance organizations have been shown to have the most appropriate emergency equipment available.³

Table 1. Office emergency equipment

LOW-RISK OFFICE

Telephone
Stethoscope
Blood pressure cuff
Basic dressing supplies
Pocket mask for cardiopulmonary resuscitation

MODERATE-RISK OFFICE (typical family physician's office)

Airway bag-valve mask (adult and pediatric), oral airway tubes
Parenteral therapy: syringes (1, 3, 10, 60 mL), needles (14, 18, 23, 25 gauge), alcohol
Wound therapy: saline, gauze (4x4 pads, rolls), waterproof and paper tape
Glucometer
Medications: nitroglycerin spray (0.4 mg), acetylsalicylic acid tablets (325 mg), lorazepam (1 mg sublingual preparation), 50% glucose solution, glucagon (1 mg subcutaneous or intramuscular [IM]), epinephrine (1 mg of 1/1000 solution or prefilled syringe), diphenhydramine (50 mg of oral and parenteral preparations)

HIGH-RISK OFFICE

Intubation equipment: laryngoscopes (two sizes), endotracheal tubes (sizes 3-8), Magill forceps, suction equipment with tonsil tip catheter
Oxygen supplies: nasal prongs, masks with rebreather bag, tubing, oxygen tank, pulse oximeter
Intravenous supplies: tourniquets, catheters (Nos. 14, 18, 22, 25), normal saline, intravenous (IV) pole and tubing
Cardiac care: automatic electronic defibrillator (currently not standard of care), electrocardiogram (ECG) machine
Obstetrical care: delivery tray, cord clamps, sterile towels, 10 U of oxytocin IV or IM
Neonatal supplies: sterile towels, additional oral airway tubes and masks, laryngoscope blade, umbilical vein catheters
Surgical scalpels (Nos. 10, 15), forceps, clamps, suture material (non-absorbable and absorbable 3-0, 4-0, 5-0)
Wheelchair or stretcher
Aerosol therapy: nebulizer supplies or three sizes of aerochambers or masks
Extra medications: oral and parenteral haloperidol (10 mg), lorazepam (4 mg parenteral), oral and parenteral diazepam (10 mg), furosemide (80 mg parenteral), ceftriaxone (1 g parenteral), morphine (10 mg/mL ampules), salbutamol, ipratropium bromide by aerosol metered dose inhaler with aerochamber or nebulizer, parenteral corticosteroids

Based on Schexnayder and Schexnayder,⁵ Hodge⁶, American College of Emergency Physicians,¹² Lowe and Stephenson,¹³ Altietti et al,¹⁴ and Consensus Development Conference.¹⁵

Clearly, cost is currently an obstacle. Estimated cost (in November 2001) for the equipment listed in **Table 1** under the moderate-risk classification is \$1000 (Canadian funds). Additional equipment would add approximately the following costs:

- intubation supplies, \$750;
- electrocardiogram machine, \$500 to \$1000;
- pulse oximeter, \$1100;
- high-risk medications, \$500;
- automatic electronic defibrillator, \$4500; and
- emergency delivery and neonatal supplies, \$500.

All emergency equipment should be located in a self-contained mobile cart, toolbox, or soft bag. A checklist should be posted, and one staff member should be responsible for restocking items, checking expiry dates, and checking batteries monthly or if the seal has been broken.^{4,7} Treatment plans, flowsheets, and dose charts should be immediately available.

General approach to emergency situations

Triage and initial assessment. The first clinician on the scene should do the initial triage and

begin basic cardiac life support if indicated. Airway and breathing should be evaluated and artificial respiration commenced if necessary. A bag-valve mask or simple pocket mask can protect against exposure to respiratory secretions. Responsibility can be transferred to more experienced staff when they become available. Supplemental oxygen is frequently employed. Circulatory status can be evaluated by checking pulse, blood pressure, and capillary refill.⁶⁻⁸

Throughout triage, consideration should be given to activating 911 EMS once it becomes clear that assistance is needed. This is particularly important for conditions such as acute coronary syndrome (**Figure 2**¹⁷⁻¹⁹) because there might be a specific treatment (thrombolytic therapy) that is dependent on rapid administration.

Establish leadership. The leader is usually the first physician on the scene. Responsibility can be transferred to a more experienced colleague if mutually agreeable. Leaders should speak softly and clearly and establish a calm, controlled environment. If possible,

CME
.....

Dealing with office emergencies

leaders should delegate clinical duties to allow themselves a clear overview of the situation.

Mobilize resources. The leader should request assistance as soon as it is appropriate. A non-clinical team member should be asked to enlist help from within the office. With violent patients (**Figure 3**), it might be wise to do this silently so as not to cause panic.

Control the scene. Non-clinical team members should be delegated to control the flow of patients and health care workers. Other patients should be told that there is an emergency situation and directed away from the scene. Staff members should direct EMS personnel in

the parking lot and at elevators. Health care workers who are not involved in the emergency should be asked to stay clear of the traffic flow. The safety of the environment should be a top priority to prevent additional injury to health care workers or other patients.

Information from family and medical chart. A nurse can be asked to collect information from the patient's family and report back to the team. The most important areas to research are recent history, medications, allergies, and past history.

Treatment. Treatment varies greatly with setting and time to definitive care. Management depends on

Figure 2. Emergency response to acute coronary syndrome: Patient has a history of severe, heavy, or crushing chest pain of typical ischemic character, diaphoresis, shortness of breath.

COMMUNICATIONS		MEDICAL RESPONSE
1. Call 911 and alert emergency medical services (EMS)	TRIAGE PHASE	1. Check airway, breathing, circulation, vital signs 2. Triage after a brief history and physical examination 3. Verify diagnosis 4. Assess severity (ie, vital signs, shock, arrhythmias, congestive heart failure) 5. Maintain a safe environment
2. Establish leadership and direct activities 3. Obtain immediate assistance within the office 4. Start a flowsheet to identify time of onset and alert EMS team if patient needs rapid access to thrombolysis 5. Obtain history from family, and update family on situation 6. Communicate with and relocate other patients as needed 7. Obtain old chart, look for cardiac risk factors, rule out other causes of chest pain, check for history of contraindications to thrombolysis (ie, hemorrhagic cardiovascular accident (CVA), nonhemorrhagic CVA within 1 year, brain tumour, active bleeding, aortic dissection, trauma or serious surgery, anticoagulation therapy, pregnancy, uncontrolled severe hypertension, streptokinase allergy, or use from 5 days to 2 years ago)	MANAGEMENT PHASE	6. Obtain required equipment 7. Move patient as required 8. Do a secondary survey, a detailed physical examination 9. Do additional investigations (electrocardiographic examination and assess for indications for thrombolysis) 10. Assess need for immediate treatment: severe pain distress, unstable vital signs 11. Initiate treatment <ul style="list-style-type: none"> • Oxygen • Give chewable acetylsalicylic acid (160-325 mg) • Intravenous line, if possible; give normal saline • Give nitroglycerin (0.4 mg sublingual spray every 5 minutes as needed)* • Consider morphine (2.5 mg intravenously every 5 minutes as needed)*
8. Direct EMS team in parking lot, elevator, etc 9. Call hospital emergency room and warn of a possible thrombolysis candidate 10. Sign over to EMS 11. Gather written transfer materials, copy of flowsheet, summary, etc	TRANSFER PHASE	12. Reevaluate status and response to therapy 13. Transfer for definitive care
12. Debrief team immediately 13. Hold delayed team meeting and debriefing	FOLLOW UP AND DEBRIEFING	

Based on Kells,¹⁷ College of Physicians and Surgeons of Manitoba,¹⁸ and Heart and Stroke Foundation et al.¹⁹

*These medications should not be given to patients with low blood pressure (systolic >100 mm Hg) without an intravenous line.

the experience of the practitioners involved and the urgency and availability of treatment. For example, **Figure 4**^{10,11,20-22} shows that, for severe anaphylaxis, treatment with epinephrine should not be delayed.^{20,22}

Flowsheet. A nurse or another physician should be asked to document treatment times on a flowsheet.⁷ It might be useful to have a prepared template on which names of team members, time of EMS request, and treatment doses and times can be recorded.

Secondary survey. Following acute resuscitation and treatment, a more detailed history and physical

examination should be carried out. The patient's chart should be located, and information from it relayed to the team. Copies can be made to accompany the patient to the emergency room.

Transfer for definitive care. Police or EMS are usually the preferred mode of transfer. An exit route from the office that is free of obstacles and can accommodate a stretcher, personnel, and equipment should be predetermined. Referring physicians are responsible for patients until they reach a receiving hospital.⁶ Transfer by private automobile should be avoided except in rare circumstances.⁴

Figure 3. Emergency response to a violent patient: Patient is agitated, psychotic, threatening, or engaged in criminal or other dangerous activity.

COMMUNICATIONS		MEDICAL RESPONSE
1. Call 911 and alert police. Consider silent alert button if a high-risk office	TRIAGE PHASE	1. Check airway, breathing, circulation 2. Triage after a brief history and physical examination 3. Verify diagnosis 4. Assess severity: past violence, psychosis, intoxicants, weapons 5. Maintain a safe environment
2. Establish leadership and direct activities 3. Obtain immediate assistance within the office Consider written alert or code system 4. Start a flowsheet 5. Obtain history from family, and update family on situation 6. Communicate with and relocate other patients as needed for safety 7. Obtain old chart, gather information	MANAGEMENT PHASE	6. Obtain required equipment 7. Move patient to a secure, quiet room. Position yourself near an open door 8. Do a secondary survey, more detailed history 9. Do additional investigations 10. Assess need for immediate treatment to protect safety of patient or others 11. Initiate treatment <ul style="list-style-type: none"> • Do be quiet and nonconfrontational, sit down, talk softly, avoid excessive eye contact, be honest, offer food or drink, be attentive, and appear in control • Do not get angry, ignore, lie, disarm, attempt to restrain, be aggressive, try to be a hero, get distracted, or appear scared or out of control • Use restraints (only as last resort and with patient's consent if possible) • Give haloperidol (initial dose 5 mg, total dose 5-20 mg intramuscularly [IM] or orally), lorazepam (initial dose generally 2 mg, range 1-4 mg IM or orally) • "Get physical" only as a last resort; ensure there are a minimum six people; avoid injury to staff
8. Direct emergency medical services team in parking lot, elevator, etc 9. Call hospital emergency room 10. Sign over to police 11. Gather written transfer materials and copy of flowsheet, complete Form 1 (involuntary psychiatric assessment) as applicable	TRANSFER PHASE	12. Reevaluate status and response to therapy
12. Debrief team immediately 13. Hold delayed team meeting and debriefing	FOLLOW UP AND DEBRIEFING	13. Transfer for definitive care

CME

.....

Dealing with office emergencies

Figure 4. Emergency response to anaphylaxis: Generalized allergic reaction as evidenced by diffuse erythema, hives, swelling, shortness of breath, or hypotension.

COMMUNICATIONS		MEDICAL RESPONSE
1. Call 911 and alert emergency medical services (EMS)	TRIAGE PHASE	1. Check airway, breathing, circulation, vital signs 2. Triage after a brief history of allergic exposure and physical examination 3. Verify diagnosis: differential diagnosis includes local allergic reaction, anxiety, panic attack, vasovagal syncope, seizure 4. Assess severity: airway involvement, tachycardia, hypotension, panic, shock 5. Maintain a safe environment 6. Obtain required equipment 7. Move patient as required 8. Do a secondary survey 9. Do additional investigations 10. Assess need for immediate treatment: hypotension, generalized swelling, airway or breathing concerns
2. Establish leadership and direct activities 3. Obtain immediate assistance within the office 4. Start a flowsheet 5. Obtain history of allergic exposures from family, and update family on situation 6. Communicate with and relocate other patients as needed 7. Obtain old chart, gather information	MANAGEMENT PHASE	11. Initiate treatment <ul style="list-style-type: none"> • Oxygen • Epinephrine (EpiPen or 1 mg per mL ampule of 1/1000 solution): adult 0.3-0.5 mg (0.3-0.5 mL) subcutaneously (SC) or intramuscularly (IM); child 0.01 mg per kg SC or IM (max 0.5 mg), may repeat every 15-20 minutes • Diphenhydramine (eg, Benadryl): adult 50-100 mg IM or orally; child 1-2 mg per kg IM or orally • Intravenous normal saline: adult 1-L bolus; child 10 mL per kg; may repeat once • Consider tourniquet above allergen
8. Direct EMS team in parking lot, elevator, etc 9. Call hospital emergency room and clearly outline airway status and vital signs 10. Sign over to EMS 11. Gather written transfer materials, copy of flowsheet, summary, etc	TRANSFER PHASE	12. Reevaluate status and response to therapy 13. Transfer for definitive care: observe for a minimum of 4 hours
12. Debrief team immediately 13. Hold delayed team meeting and debriefing	FOLLOW UP AND DEBRIEFING	

Based on Greenberger,¹⁰ Gordon,¹¹ Nicklas et al,²⁰ National Advisory Committee on Immunization,²¹ and Thibodeau.²

Communication with receiving team. Before transfer, a verbal summary should be given to EMS personnel and emergency department staff.^{4,6} The flowsheet, written summary, and chart materials should be copied and sent to the hospital. The leader should meet with the patient's family to describe his or her current status.

Debriefing. The team should not underestimate the emotional effect of an emergency. Staff will look to the leader to provide immediate feedback, particularly with respect to what was done well. A meeting

should be arranged within several days, and all team members should be encouraged to discuss their perceptions of the incident and their roles.⁹

Develop specific management plans

Management plans for specific symptoms or diseases can be developed by identifying common scenarios, reviewing the literature, and inserting specific management activities into your general template. Sample management plans for three common office emergencies are shown in **Figures 2, 3, and 4.** The medical and therapeutic aspects of these

protocols are based on long-standing, accepted emergency medicine practices and consensus statements. The communication and organizational aspects are based primarily on expert opinion.

Acute coronary syndrome. The main goal of managing acute coronary syndrome in the office is to assess quickly whether a patient needs emergency treatment and particularly to identify rapidly whether he or she requires thrombolytic therapy. Evaluation and resuscitation can be started in the office, and physicians should try to assess through a focused history and physical examination whether there are other factors to consider, such as a thoracic aortic dissection or respiratory or gastrointestinal causes.

Contraindications to thrombolysis can be identified and recorded on transfer documents. An electrocardiogram should be done if it does not delay transfer. Administration of nitroglycerin and morphine can be titrated to patients' pain, but should be given intravenously only to patients with low systolic blood pressure (>100 mm Hg) (**Figure 2**¹⁷⁻¹⁹).

Violent patients. Psychotic, intoxicated, or dangerous patients can be frightening and can cause disasters. The first principle is to protect staff and other patients from harm. Police and the EMS team should be summoned quickly and quietly. **Figure 3** outlines an interview approach that is calm and unthreatening and suggests ways staff and patients can escape the area.²³⁻²⁷ Chemical restraint can be used; voluntary acceptance of such medication is preferable, whenever possible. Physical restraint can cause violence to escalate and should be used only as a last resort (ideally, at least six people are needed for physical restraint).

Anaphylaxis. Any office that administers parenteral medications or vaccinations should be prepared for allergic reactions. In rural areas, patients with environmental exposures, such as Hymenoptera stings, often come first to a doctor's office. Anaphylaxis can cause airway obstruction, cardiovascular collapse, and death. Virtually all cases of severe anaphylaxis require a period of observation following treatment; this usually occurs in an emergency room. A step-wise approach to managing anaphylaxis is shown in **Figure 4**.^{10,11,20-22}

Conclusion

Family physicians and their office staff can prepare themselves with a simple approach to initial manage-

Editor's key points

- Most family physicians' offices do not have adequate equipment or management plans to deal effectively with emergencies.
- Equipment and management plans should be geared to the degree of risk a practice carries, which is based on location, proximity to a hospital, type of patients, number of physicians, and types of procedures carried out there.
- Management plans should include all office staff and cover initial triage, communications (eg, 911 emergency services), and basic medical care until help arrives.
- The first physician on the scene should assume the role of team leader to coordinate activities and maintain calm.
- After the crisis, debriefing should address modifications to the management plan suggested by the emergency and deal with the stress experienced by the team.

Points de repère du rédacteur

- La plupart des cabinets de médecine familiale ne sont pas équipés pour s'occuper adéquatement des urgences et n'ont pas prévu de mesures spéciales pour ces cas.
- La mise en place de tels équipements et mesures doit tenir compte du niveau de risque propre à chaque type de pratique, lequel dépend du lieu du cabinet, de la proximité d'un hôpital, du type d'interventions médicales effectuées, du nombre de médecins et du type de clientèle.
- Tous les membres du personnel ont un rôle à jouer dans ces nouvelles mesures, qui portent sur le triage initial, les communications (p.ex., avec le service d'urgence du 911) et les soins médicaux de base avant l'arrivée des secours additionnels.
- Le premier médecin arrivé sur les lieux doit assurer la coordination et la direction des activités tout en maintenant le calme.
- Une fois la crise passée, il y a lieu de réviser ces mesures d'urgence en fonction de cette expérience et de s'occuper du stress subi par les membres de l'équipe.

ment of office emergencies. Emergency equipment should be stocked at a level appropriate to the risk profile of the office. Treatment plans should include assignment of specific roles. The team should have a clear leader who coordinates activities and maintains a calm environment. Following an emergency situation, the team should meet to review their roles in

the emergency response and revise the management plan as required. The result will be a team that works efficiently using available resources and that is ready for emergencies when they least expect them. ❁

Competing interests

None declared

Correspondence to: Dr Ian P. Sempowski, Family Medicine Centre, 220 Bagot St, PO Bag 8888, Kingston, ON K7L 5E9; telephone (613) 549-4480; fax (613) 544-9899; e-mail sempowski@post.queensu.ca

References

1. Kobernick M. Management of emergencies in the medical office. *J Emerg Med* 1985;4:71-4.
2. Fuchs S, Jaffe DM, Christoffel KK. Pediatric emergencies in office practices: prevalence and office preparedness. *Pediatrics* 1989;83:931-9.
3. Schweich PJ, DeAngelis C, Duggan AK. Preparedness of practicing pediatricians to manage emergencies. *Pediatrics* 1991;88:223-9.
4. Wheeler D, Kiefer M, Poss W. Pediatric emergency preparedness in the office. *Am Fam Physician* 2000;61:3333-41.
5. Schexnayder S, Schexnayder R. 911 in your office: preparations to keep emergencies from becoming catastrophes. *Pediatr Ann* 1996;25:664-76.
6. Hodge D III. Pediatric emergency office equipment. *Pediatr Emerg Care* 1988;4:212-4.
7. Fader D, Johnson T. Medical issues and emergencies in the dermatology office. *J Am Acad Dermatol* 1997;36:1-18.
8. Sapien R, Hodge D III. Equipping and preparing the office for emergencies. *Pediatr Ann* 1990;19:659-67.
9. McCague J. What if someone has an MI in your office? *Med Econ* 1993;70:149-55.
10. Greenberger P. Allergic emergencies in the physicians office. *Clin Rev Allergy Immunol* 1999;17(4):401-2.
11. Gordon B. Prevention and management of office allergy emergencies. *Otolaryngol Clin North Am* 1992;25:119-35.
12. American College of Emergency Physicians. Pediatric equipment guidelines. *Ann Emerg Med* 1995;25:307-9.
13. Lowe B, Stephenson M. Are general practitioners really prepared? An audit of emergency equipment in general practice. *N Z Med J* 1994;107:486-7.
14. Altieti M, Bellet J, Scott H. Preparedness for pediatric emergencies encountered in the practitioner's office. *Pediatrics* 1990;85:710-4.
15. Consensus Development Conference. Guidelines 2000 for cardiopulmonary resuscitation and emergency cardiac care. Part 12: from science to survival; strengthening the chain of survival in every community. *Resuscitation* 2000;46:417-30.
16. Nichol G, Stiell I, Laupacis A, Pham B, De Maio VJ, Wells GA. A cumulative meta-analysis of the effectiveness of defibrillator-capable emergency medical services for victims of out-of-hospital cardiac arrest. *Ann Emerg Med* 1999;34(4 Pt 1):517-25.
17. Kells CM. Myocardial infarction. Canadian Cardiovascular Society Consensus Conference on Indications for and Access to Revascularization (1995). *Can J Cardiol* 1997;13(Suppl D):40D-6D.
18. College of Physicians and Surgeons of Manitoba. *Standards Committee. Thrombolytic therapy for acute myocardial infarction: streptokinase (SK) and tissue plasminogen activator (TPA)*. Winnipeg, Man: College of Physicians and Surgeons of Manitoba; 1999.
19. Heart and Stroke Foundation of Canada, Canadian Cardiovascular Society, Canadian Association of Emergency Physicians, for the Emergency Cardiac Care Coalition. Recommendations for ensuring early thrombolytic therapy for acute myocardial infarction. *Can Med Assoc J* 1996;154(4):483-7.
20. Nicklas RA, Bernstein IL, Li J, Lee R, Spector SL, Dykewicz MS, et al, editors. The diagnosis and management of anaphylaxis. Joint Task Force on Practice Parameters. *J Allergy Clin Immunol* 1998;101(Suppl 6):S465-S528.
21. National Advisory Committee on Immunization. Anaphylaxis: statement on initial management in non-hospital settings. *Can Commun Dis Rep* 1995;21:200-3.
22. Thibodeau JL. Office management of childhood vaccine-related anaphylaxis. *Can Fam Physician* 1994;40:1602-10.
23. Lande R. The dangerous patient. *J Fam Pract* 1989;29:74-8.
24. Menninger W. Management of the aggressive and dangerous patient. *Bull Menninger Clin* 1993;57:208-17.
25. Levy A, Salagnick I, Rabinowitz S, Neumann M. The dangerous psychiatric patient. Part II: short-term treatment. *Med Law* 1989;8:261-6.
26. Levy A, Salagnick I, Rabinowitz S, Neumann M. The dangerous psychiatric patient. Part I: epidemiology, etiology, prediction. *Med Law* 1989;8:131-6.
27. Rosen P, Barkin R, Danzl D, Hockberger R, Ling L, Markovich V, et al. *Emergency medicine: concepts and clinical practice*. St Louis, Mo: Mosby; 1998. p. 2871-9.