ABSTRACT

A look at what to do in time of natural and man-made disasters is presented. Disasters covered include tornados, hurricanes, floods, fires, blizzards, and nuclear disaster. responsibilities of the Board of Education, school superintendent, school principal, teachers, school nurse, custodian, students, bus drivers, and cafeteria workers are outlined. (CK)
Disaster Preparedness in YOUR School

TEXAS EDUCATION AGENCY
DIVISION OF ADULT AND CONTINUING EDUCATION
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ster Preparedness in YOUR School
Someone has said that Civil Defense is as old as Noah and his ark. But since the dawn of his existence on earth, man has been coping with his environment and how to survive in it.

We've marveled at the scenic monuments in our national parks. A Grand Canyon here . . . a Garden of the Gods there. But in viewing this splendor of sand and stone, how often have we thought about the natural disasters that carved these niches of grandeur?

Such as wind in a hurry!

Educators have long contended with The Three R's. But man with his instinct for survival has been fighting The Three F's. Famine . . . flood . . . . and fire.

Not to mention hurricanes and tornadoes . . . . and the possibility of nuclear attack.

DISASTER PREPAREDNESS IN YOUR SCHOOL is a quick look at what to do in time of disaster . . . . natural and man-made.

The word "quick" is a wise choice. For in the art of Civil Defense, time is of the essence. Tomorrow can often be too late. And two seconds from now often cannot be soon enough.
Strategy Counts in the Game of Life

If you're going to get defensive about Civil Defense, you have to work out the strategies long before an unladylike Beulah or Carla comes calling.

Take a tip from the experts in the art of defense. The football coaches who return to coach another season have worked out the game plan... well in advance... play by play... to meet all emergencies.

Their is a game of sport. Yours is the game of life.

If disaster struck tomorrow, how well could each member of the “team”—from the Board of Education to the worker in the cafeteria—carry out his responsibility?

BOARD OF EDUCATION

Issue a statement of policy on school community Civil Defense

Consider school construction specifications to meet the needs of Civil Defense

Provide needed personnel and funds for meeting the school's responsibilities in Civil Defense

Review or make Civil Defense plans for the school

SCHOOL SUPERINTENDENT

Make recommendations to the Board of Education to secure needed policy

Coordinate the Civil Defense program with the community's authority in Civil Defense and the schools in the area

Review progress and make continued recommendations

Appoint a Civil Defense council in the school

Designate someone as the school's coordinator of Civil Defense

Determine what use local Civil Defense authorities can make of the school's facilities in time of emergency
SCHOOL PRINCIPAL

Learn responsibilities for organizing the Civil Defense program in the school

Initiate and supervise the planning of a Civil Defense program for the school

Coordinate the Civil Defense plans for the school with those of other schools in the area

Review the plans for the school with the community's authority in Civil Defense

Delegate Civil Defense responsibilities to staff personnel according to competencies

Provide leadership for teachers in securing needed in-service training

Inform parents about the school's Civil Defense program

Test the school's Civil Defense plans and— if necessary— make needed revisions

Appoint a school advisory committee for Civil Defense made up of school representatives, parents, civic organizations, and local Civil Defense personnel

TEACHERS

Participate in making Civil Defense plans for the school

Become informed about new developments related to the various types of emergencies that may result from both natural disasters and enemy attack

Provide instruction and practice in the Civil Defense plan and in survival techniques

Integrate recent and pertinent Civil Defense data into regular classroom instruction

Instruct children in such ways that they develop confidence in their ability to take care of themselves and to be of assistance to others

Become familiar with minimum first aid procedures

Become familiar with the psychological techniques for working with children under stress during emergencies

Help children to understand and to interpret the Civil Defense program to their parents

SCHOOL NURSE

Know the effects on the body of chemical and biological agents and radiation

Learn specialized knowledge of first aid in disaster situations

Render first aid, treat casualties, and prepare them for transportation to a hospital

Supervise and train first aid teams, stretcher bearers, and home nurses

Advise students and teachers on emergency health sanitation measures
Coordinate school health service plans
Provide for the care of the physically handicapped
Plan for the use of school facilities as centers for mass care, housing, hospitalization, or rehabilitation

Direct recreational activities in periods of confinement
Act as messengers and perform other services
Understand the characteristics of radiation

CUSTODIAN
Inspect utilities for structural safety
Prepare a chart or charts showing shut-off valves and switches for all utilities and post this information for use by others
Provide for emergency operation of ventilating system
Provide for cut-off drainage of hot water and steam lines in shelter areas
Post location of all protective equipment
Instruct school personnel in the use of fire extinguishers

BUS DRIVERS
Know how to render first aid
Know various routes for students to reach safety
Know emergency precautions
Keep vehicles in readiness
Learn the fundamentals of emergency living

STUDENTS
Become prepared in aiding others. (Older students can assist the students in the lower grades.)
Help inform parents about Civil Defense programs

CAFETERIA WORKERS
Maintain adequate supply of food and water
Provide for emergency feeding
Learn protective measures as applied to feeding under disaster conditions
Civil Defense Is Also

**TORNADO**

Local storm of short duration formed of winds rotating at high speeds. Usually appears as a funnel-shaped cloud moving in a counterclockwise direction. Path of destruction averages only an eighth of a mile wide and five miles long. The most violent weather phenomenon known to man.

**HURRICANE**

"Tropical cyclone" that begins near but not directly over the equator. Most powerful of all storms. Must have a wind velocity of 74 miles per hour or more. Diameter may be 50 to 75 miles--or greater. Path of destruction may cover as much as 500 miles.

**FLOOD**

Natural disaster caused by too much water too quickly. May be seasonal, as when spring rains overflow river basins. May be sudden, as when heavy precipitation causes "flash" flooding paths of destruction.

**FIRE**

The faulty wiring that ignites. The box of matches within the grasp of a child. The explosion of gasoline in an unventilated area. The bolt of lightning that strikes of destruction. The plane crash that leaves an aftermath of charred ruins. Just a handful of the many kinds of fire.

**BLIZZARD**

Winter's most dramatic and perilous storm. Like a snowflake, it takes a variety of shapes. Such as freezing rain or drizzle in below-freezing surface temperatures. Or snow in the form of flurries that reduce visibility and make for hazardous driving . . . . or in the form of drifts that pile up several feet deep and cripple mobility.

**NUCLEAR DISASTER**

Two kinds. One may be an attack on the United States of America by an enemy force. The use of nuclear weapons would create radioactive fallout. Also, nuclear detonations at or near the surface of the earth might cause fire, blast, and heat. The other kind could be a nuclear accident caused by improper use of radioactive materials used in peaceful activities such as industry.

**a Matter of Definition**
Safety Rules

IF YOU ARE NEAR A TORNADO CELLAR

WHEN TIME PERMITS, GO TO A TORNADO CELLAR, CAVE OR UNDERGROUND EXCAVATION. THIS SAFETY AREA SHOULD HAVE AN AIR OUTLET TO HELP EQUALIZE THE AIR PRESSURE. IT SHOULD ALSO BE KEPT FIT FOR USE AND FREE FROM WATER, GAS OR DEBRIS. PREFERABLY, IT SHOULD BE EQUIPPED WITH A PICK AND SHOVEL. THERE IS NO UNIVERSAL PROTECTION AGAINST TORNADOES EXCEPT UNDERGROUND EXCAVATIONS.

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IF YOU ARE IN OPEN COUNTRY

MOVE AT RIGHT ANGLES TO THE TORNADO'S PATH. TORNADOES USUALLY MOVE AHEAD ABOUT 25 TO 40 MILES PER HOUR. IF THERE IS NO TIME TO ESCAPE, LIE FLAT IN THE NEAREST DEPRESSION SUCH AS A DITCH OR RAVINE.

IF IN SCHOOLS

IF THE SCHOOL BUILDING IN THE CITY AREA IS OF STRONGLY REINFORCED CONSTRUCTION, STAY INSIDE away from windows. REMAIN NEAR AN INSIDE WALL ON THE LOWER FLOORS WHEN POSSIBLE. Avoid auditoriums and gymnasiums with large, poorly supported roofs. IF THE SCHOOL BUILDING IS IN A RURAL AREA AND DOES NOT HAVE STRONGLY REINFORCED CONSTRUCTION, REMOVE CHILDREN AND TEACHERS TO A RAVINE OR DITCH IF A STORM SHELTER IS NOT AVAILABLE.

IF IN FACTORIES AND INDUSTRIAL PLANTS

WHEN A TORNADO WARNING IS RECEIVED, A LOOKOUT SHOULD BE POSTED TO KEEP SAFETY OFFICIALS ADVISED OF THE TORNADO'S APPROACH. ADVANCE PREPARATION SHOULD BE MADE FOR MOVING WORKERS TO THOSE SECTIONS OF THE PLANT OFFERING THE GREATEST PROTECTION. Keep calm. IT WILL NOT HELP TO GET EXCITED. PEOPLE HAVE BEEN KILLED BY RUNNING OUT INTO STREETS AND BY TURNING BACK INTO THE PATH OF A TORNADO. EVEN THOUGH A WARNING IS ISSUED, THE CHANCES OF A TORNADO STRIKING ONE'S HOME OR LOCATION ARE VERY SLIGHT. TORNADOES COVER SUCH A SMALL ZONE, AS A RULE, THAT RELATIVELY ONLY A FEW PLACES IN A WARNED AREA ARE DIRECTLY AFFECTED. YOU SHOULD KNOW ABOUT TORNADOES THOUGH . . . . "JUST IN CASE." KEEP TUNED TO YOUR RADIO OR TELEVISION STATION FOR THE LATEST TORNADO ADVISORY INFORMATION. DO NOT CALL THE WEATHER BUREAU--EXCEPT TO REPORT A TORNADO--AS YOUR INDIVIDUAL REQUEST MAY TIE UP URGENTLY NEEDED TELEPHONE LINES. THESE LINES SHOULD BE KEPT OPEN TO RECEIVE SPECIAL REPORTS OR TO RELAY VITAL INFORMATION TO RADIO AND TELEVISION STATIONS FOR TRANSMITTAL TO THE CRITICAL AREA.

IF IN A CITY OR TOWN

SEEK SHELTER INSIDE--PREFERABLY IN A STRONGLY REINFORCED BUILDING. STAY AWAY FROM WINDOWS! IF YOU ARE IN A HOME, THE CORNER OF THE BASEMENT TOWARD THE TORNADO USUALLY OFFERS THE GREATEST SAFETY. THIS IS PARTICULARLY TRUE IN FRAME HOUSES. PERSONS IN HOMES WITHOUT A BASEMENT CAN SOMETIMES BE PROTECTED BY TAKING COVER UNDER HEAVY FURNITURE AGAINST INSIDE WALLS. DOORS AND WINDOWS ON THE SIDES OF THE HOUSE AWAY FROM THE TORNADO MAY BE OPENED TO HELP REDUCE DAMAGE TO THE BUILDING. STANDING AGAINST THE INSIDE WALL ON A LOWER FLOOR OF AN OFFICE BUILDING OFFERS SOME PROTECTION.
Safety Rules

Keep your radio or television set on. Listen for the latest Weather Bureau alerts, warnings, and advisories. If power fails, use your car radio.

Pay no attention to rumors.

Get away from low-lying beaches or other locations that may be swept by high tides or storm waves. If passage to high ground is over a road likely to be under water, leave early. Don't run the risk of being marooned.

Be alert for high water in those areas where streams or rivers may flood after heavy rains.

If your home is out of danger from high tides and is well built, it is probably the best place to weather the storm.

Board up windows or put storm shutters in place. When you board up, use good lumber and fasten it securely. Make-shift boarding may do more damage than none at all. Have strong bracing for outside doors.

Get in extra food. Your "shopping list" should especially include items that can be eaten without cooking or that require little preparation. Remember that electric power may be off, and you may be without refrigeration.

If emergency cooking facilities are necessary, be sure they are in working order.

Sterilize the bathtub, jugs and bottles, and cooking utensils. Fill them with drinking water because city water service may be interrupted.

Have flashlights and/or emergency lights in working condition. Keep them handy.

Be sure you have gasoline in your car. If electric power is off, service stations may not be able to operate pumps for several days.

Check on everything--repeat: everything--that might blow away or be torn loose. Garbage cans, garden tools, signs, porch furniture, awnings, and other objects become weapons of destruction in hurricane winds. Store them all inside, if possible.

Be sure that a window or door can be opened on the lee side of the house. The lee side is opposite the one facing the wind.

If the center or "eye" of the storm passes directly over your area, there will be a lull in the wind. This lull will last from a few minutes to half an hour or more. Stay in a safe place. Make necessary emergency repairs during the lull. But remember that the wind will return suddenly from the opposite direction . . . . frequently with even greater violence.

Be calm. Your ability to meet emergencies in a calm manner will inspire and help others.
Safety Rules

BEFORE THE FLOOD
Keep on hand materials, such as sandbags, plywood, plastic sheeting and lumber. Install check valves in building sewer traps to prevent flood waters from backing up into sewer drains. Arrange for auxiliary electric supplies for hospitals and other operations that are critically affected by power failure. Keep your automobile fueled and ready to go. If electric power is cut off, service stations may not be able to operate pumps for several days. Keep on hand a supply of food that requires little cooking and no refrigeration. Remember, electric power may be interrupted. Keep a portable radio, emergency cooking equipment, and lights and flashlights in working order.

WHEN YOU RECEIVE A FLOOD WARNING
Store drinking water in clean bathtubs and in various containers. Remember, water service may be interrupted. If you are forced to leave your home and time permits, move essential items to safe ground. Grease immovable machinery. Move to a safe area before access is cut off by flood water.

DURING THE FLOOD
Avoid areas subject to sudden flooding. Do not attempt to cross a flowing stream where water is above your knees. Do not attempt to drive over a flooded road. Remember, you can be stranded—and trapped. Stay tuned to your local radio or television station.

AFTER THE FLOOD
Do not use fresh food that has come in contact with flood waters. Test drinking water to see if it is suitable for drinking. Wells should be pumped out, and the water should be tested before drinking. Seek necessary medical care at the nearest hospital. Food, clothing, shelter, and first aid are available at Red Cross shelters.

Do not visit the disaster area. Your presence might hamper rescue and other emergency operations.

Do not handle live electrical equipment in wet areas. Electrical equipment should be checked and dried before returning to service.

Use flashlights—not lanterns or torches—to examine building. Flammable materials may be inside those buildings.

Report broken utility lines to the appropriate authorities.

A GUIDE TO FLASH FLOODING THAT MAY SAVE YOUR LIFE
FLASH FLOOD means the occurrence of a dangerous rise in the water level of a stream or over a land area in a few hours or less. This dangerous rise may be caused by heavy rain, an ice jam breaking up, an earthquake, or a dam failure.
FLASH FLOOD WATCH means that heavy rains occurring or expected to occur may cause flash flooding in certain areas. Persons in those areas should be alert to the possibility of a flood emergency that will require immediate action.
FLASH FLOOD WARNING means that flash flooding is occurring or is imminent on certain streams or designated areas. Immediate precautions should be taken by those threatened.
Safety Rules

Sound the school fire alarm as a signal for immediate action: leave building. (Those fire drills prove their worth in time of emergency because everyone knows the prearranged route of evacuating the building.) Assemble the school staff and the students at a safe distance from the fire and also away from fire-fighting equipment. Render first aid as needed. Notify the fire department. (Aren't you glad you had that telephone number handy? You must have saved five (5) seconds of precious time . . . . and maybe five (5) precious lives too!) Notify the police department and the sheriff's office. (Those numbers came in handy, too!) If it is possible to fight small fires without endangering life, do so. Be sure all access roads to the fire are open for quick arrival of emergency vehicles. (Isn't it a good thing that periodic checks are required of all fire extinguishers?) Take the roll of the persons--staff and students--who evacuated the building. Notify the school superintendent or appropriate school official. If you notice any break--or suspected break--in utility lines, notify the utility company. That particular telephone call may prevent an additional hazard. Staff and students should not return to the school until officials of the fire department have declared the area safe. And if it is not safe, the principal should dismiss classes.

HOW TO EVACUATE A BUILDING

Check roll in the room. Then check it again at the assembly point for missing students.

Time is of the essence. Tell students to leave all books and clothing.

Permit no talking. It's easier to hear instructions.

Close windows.

Close the door to the room but don't lock it.

Turn off the lights in the room when it has been cleared.

Post door guards to keep unauthorized persons out of building once it has been evacuated.
BLIZZARD
Safety Rules

Check the exhaust system of the school building complex daily for leaks. It makes good sense to travel over the regular school routes, if possible. Set up your own system of communications when a blizzard hits. You can do this by arranging for the parents of a child who has been let off the school bus to call the next parents on the route to let them know the bus has stopped and is on its way. If the bus does stall, the driver and children should stay with the bus. It's too easy to lose your sense of direction in a blizzard. The bus not only provides some protection from the elements but is also in the best possible location to be observed by highway maintenance crews. The driver should turn on the clearance lights. The dome light at night can be an SOS signal to motorists in the area. He should run the motor only if he has checked to see that the exhaust is taken away by air currents. Don't you be a newspaper headline in tomorrow's edition telling about the victims of carbon monoxide. Make provision for a supply of fresh air. One way of providing safe ventilation in a blizzard is to lower the windows slightly on the side away from the storm. The driver should not panic and should work slowly—and thus set a good example for the young people whose lives are in his care. He should encourage the children to clap their hands and move their arms and legs vigorously from time to time. It not only checks a sense of youthful restlessness but also stimulates circulation, warms the extremities, and relieves tension in the muscles. Above all, the driver should beware of over-exertion. Heavy manual labor—such as pushing a vehicle or shoveling heavy drifts—could lead to a heart attack in biting winds, blinding snow, and bitter cold temperatures. Folklore to the contrary, you should not eat snow. It's much healthier if you have a supply of candles and cans in which to melt the snow for drinking water. The driver should also look for signs of fatigue among his young charges. But most important, he should never permit all occupants of the bus to sleep at the same time. Someone must stand guard to guard against this dangerous weather element. School buses should be equipped with some form of communication such as a citizen band or short-wave radio. Finally, the school system should work out a ground plan of operations so driver and students can safely weather a blizzard. Such events as athletic events and contests away from the home school, field trips to other schools or cities, and senior trips start out on a high note of enthusiasm. With the proper ground plan, they can end on a happy note too!
Safety Rules

In a nuclear attack, you may have from 15 minutes to several hours to take action. The main hazards of a nuclear attack are blast, heat, fire, and fallout radiation. A person close to a nuclear explosion—in the area of heavy destruction—probably would be killed or seriously injured. A person in the fringe area could survive these hazards. The distribution of fallout particles after a nuclear attack would depend on wind currents, weather conditions, and other factors. The first 24 hours would be the most dangerous period of time. Time, distance, and shielding might be considered as the best elements of the formula necessary to survive a nuclear disaster.

HOW TO SURVIVE A NUCLEAR DISASTER

Know your local emergency plan.
Understand the hazards of nuclear attack.
Know the signal warning of such an attack.
Know the location of shelters—and if no shelter is available, improvise some form of protection.
Prepare emergency supplies.

Conservce emergency supplies.
Maintain sanitation.
Reduce fire hazards.
Learn the basic procedures of emergency medical care.
Follow official instructions.
Civil Defense Training Program

Civil Defense Education provides adults with basic survival information on natural disasters and nuclear war through the PERSONAL AND FAMILY SURVIVAL COURSE. This eight-hour course alerts adults to the need for civil defense. It develops adult knowledge and understanding of the basic civil defense principles and practices. Also, it provides adults with experience and personal and community survival planning. And it establishes a greater adult acceptance and support of local civil defense. The program is administered in cooperation with local schools, civil defense organizations, and the State Civil Defense Office. Schools may initiate a civil defense program with a letter of request. Most classes are conducted in facilities provided by schools.

CURRICULUM

The curriculum for the PERSONAL AND FAMILY SURVIVAL COURSE is determined by the Office of Civil Defense, Department of the Army. Modifications in the curriculum are made to meet the information requirements of the various communities. Particular emphasis is given to local civil defense operational plans and to survival in natural disaster.

TEACHER REQUIREMENTS

Teachers of the PERSONAL AND FAMILY SURVIVAL COURSE are normally professional public school personnel. However, any high school graduate with teaching competence may be accepted by the school as a civil defense teacher. Prospective teachers in the PERSONAL AND FAMILY SURVIVAL COURSE are trained by the Civil Defense Staff of the Texas Education Agency. Non-expiring certificates are given teachers who complete training requirements. (See Certificate on opposite page.) Teachers who do not conduct a class within a year are encouraged to enroll in a refresher training class prior to teaching again.

COURSE CONTENT OF THE PERSONAL AND FAMILY SURVIVAL COURSE

UNITED STATES CIVIL DEFENSE

MODERN WEAPONS AND RADIOACTIVE FALLOUT

PUBLIC FALLOUT SHELTERS

PREPARING FOR EMERGENCY OPERATIONS

EMERGENCE FROM SHELTERS AND RECOVERY

FAMILY EMERGENCY PLANNING

NATURAL DISASTERS

FIRST AID

SCHOOL PLANNING
CERTIFICATE

successfully completed the
Personal and Family Survival Course
In Civil Defense Education

Date

Associate Commissioner
Department of Occupational Education and Technology

Coordinator, Civil Defense
CERTIFICATE

successfully completed the
Personal and Family Survival Course
In Civil Defense Education

Date

[Signature]

Co-Director, Civil Defense Education

[Signature]

Coordinator, Civil Defense Education
COMPLIANCE WITH TITLE VI, CIVIL RIGHTS ACT OF 1964 AND THE MODIFIED COURT ORDER, CIVIL ACTION 5281, FEDERAL DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TYLER DIVISION

Reviews of local education agencies pertaining to compliance with Title VI Civil Rights Act of 1964 and with specific requirements of the Modified Court Order, Civil Action No. 5281, Federal District Court, Eastern District of Texas, Tyler Division are conducted periodically by staff representatives of the Texas Education Agency. These reviews cover at least the following policies and practices:

1. Acceptance policies on student transfers from other school districts;
2. Operation of school bus routes or runs on a non-segregated basis;
3. Non-discrimination in extracurricular activities and the use of school facilities;
4. Non-discriminatory practices in the hiring, assigning, promoting, paying, demoting, reassigning or dismissing of faculty and staff members who work with children;
5. Enrollment and assignment of students without discrimination on the ground of race, color or national origin; and

In addition to conducting reviews, the Texas Education Agency staff representatives check complaints of discrimination made by a citizen or citizens residing in a school district where it is alleged discriminatory practices have or are occurring.

Where a violation of Title VI of the Civil Rights Act is found, the findings are reported to the Office for Civil Rights, Department of Health, Education and Welfare.

If there be a direct violation of the Court Order in Civil Action No. 5281 that cannot be cleared through negotiation, the sanctions required by the Court Order are applied.