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THIRTY-EIGHTH ANNUAL REPORT

OF THE

State Fire Marshal

FOR THE YEAR

1948

DEPARTMENT OF PUBLIC SAFETY
DIVISION OF FIRE PROTECTION AND INVESTIGATION

Published by
THE STATE OF IOWA
Des Moines

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LETTER OF TRANSMITTAL

Des Moines, Iowa
January 31, 1949

HONORABLE WM. S. BEARDSLEY, *Governor of Iowa*
Des Moines, Iowa

Sir:

In compliance with the provisions of law, I have the honor to submit the Thirty-Eighth Annual Report of the affairs of this office covering the period beginning January 1, 1948, and ending December 31, 1948, both dates inclusive.

Respectfully submitted,

JOHN W. STROHM
State Fire Marshal.

DIVISION OF FIRE PROTECTION AND INVESTIGATION
DEPARTMENT OF PUBLIC SAFETY

DEPARTMENT OF PUBLIC SAFETY
DIVISION OF FIRE PROTECTION AND INVESTIGATION

Appointed by the Commissioner, Department of Public Safety
Term, Four Years, Expires July 1, 1951

Office	Name	Legal Residence	County
Fire Marshal.....	John W. Strohm.....	Clinton.....	Clinton
Assistant.....	A. Lubberden.....	Pella.....	Marion
Assistant.....	C. W. Cornell.....	Bedford.....	Taylor
Assistant.....	Zack T. Cook.....	Des Moines.....	Polk
Inspector.....	George W. Benschopf.....	Davenport.....	Scott
Inspector.....	E. J. Stebbins.....	Des Moines.....	Polk
Secretary.....	Olive R. Carlson.....	Des Moines.....	Polk
Stenographer.....	Pauline Evans.....	West Des Moines.....	Polk

RESULTS OF IOWA'S FIRE LOSS

Our fire loss for 1948 was \$9,050,377, an increase of \$753,304 over 1947.

39 of the 4,558 fires reported to our office show amounts of \$25,000 to \$366,082, representing a total of \$3,865,686, or more than one-third of the total loss for the year.

There were 1,606 Town Dwelling fires, showing a loss to buildings, \$747,490, and contents \$297,800, or a total town dwelling fire loss of \$1,045, 290.

Fires of "UNKNOWN" origin number 519, with a loss of \$3,682,179.

Smoker's Carelessness ranks second in the number of known causes, 464 fires and a loss of \$360,488.

372 fires caused by "sparks from chimney" — a loss of \$293,005.

Defective flues caused 244 fires and a loss of \$325,639, while defective and overheated stoves and heating plants caused 173 fires and a loss of \$556,042.

Other items included in our 1948 fire loss will be found in Tables 1, 2 and 3, in this report.

186 fire hazard inspections were made in 41 counties, Orders issued and fire hazards removed.

92 fire escape inspections were made covering hotels, apartments and nursing homes.

REMOVE HAZARDS — PREVENT FIRES

If you will study Table 3, at the end of this report, you will find that at least 85 per cent of our fires could be prevented if every person would make "fire prevention" his duty. It is the one job that we cannot wait for the other fellow to do for us or it may be too late.

HOUSEKEEPING

Safe "housekeeping"—care and maintenance conditions—with proper safeguarding of modern mechanized equipment and appliances, will do much to reduce the increased fire hazards that have come to our homes with this equipment which has so increased efficiency, production and ease of living for town and country folks alike.

Typical of the small items of good housekeeping which seem quite unimportant are the problems of handling and disposal of matches and smoking odds and ends. They seem insignificant, that is, until one suddenly discovers that the carelessness in this regard causes more fires and more fire loss than any other known cause.

Matches create a fire hazard, especially in the hands of children, therefore, matches should always be kept out of the reach of children, and handled with caution by grown-ups.

Don't permit combustible rubbish to accumulate near your heating system. Keep your cellar neat and clean.

Cluttered attics are open invitations to fire, waiting a discarded match or spontaneous ignition.

Greater knowledge of the causes of fire and how to guard against them today, plus a wide variety of safer building, lighting and heating materials, makes the planning of safety a gratifying and profitable undertaking.

Always keep in mind that fires on farms generally make a clean sweep if the buildings are grouped too close together. The segregation of the dwelling from the other farm buildings also permits the development of attractive surroundings and tends to separate the home life from the business of the farm. The relative positions of the farm house and the barn should be such that the prevailing wind will not blow from one to the other, but across a line between the two.

Proper construction is a major aid in delaying the spread of fires and preventing fire from getting out of control.

EXTINGUISHING FIRES

The most important factor in successfully extinguishing fires with minimum damage is early discovery and rapid action before they reach dangerous proportions. For this purpose there are certain definite essentials which should find an appropriate handy location on every farm.

Ladders, substantially built and long enough to reach the highest point of any building on the premises.

Ropes of good quality may be used for several purposes, such as reaching certain parts of burning buildings for rescue work and raising axes, water pails or extinguishers.

Axes are an important part of the needed equipment.

Sand pails—sand may be used to better advantage than water against oil or grease fires and garages and tractor sheds should be provided with a supply.

Extinguishers can be had in many sizes and kinds, and it is necessary that they be kept in good condition, inspected and refilled at least once a year.

The best time to fight fire is at the earliest possible moment and this can be done effectively only if adequate equipment is at hand.

At least 60 per cent of our fires occur in the home.

Money spent for fire prevention such as for ash trays, approved electric wiring and appliances, repairs to chimneys, new stovepipe, metal waste and ash cans, fireproof cellar ceilings and fire-resistive roofs, is more worthwhile than that spent for extinguishing equipment.

Some fires cannot be effectively fought with water. These are principally fires involving grease and they generally occur in the kitchen. Throwing water into a frying pan or other

receptacle full of grease which might be ignited will often result in a large burst of flame and the spattering of the grease over the person, or persons in the room.

RURAL FIRE DEPARTMENTS

From experience during the past few years, it has been clearly indicated that rural fire department protection is feasible and can be accomplished successfully. We have received reports from many communities throughout the rural areas of Iowa of the successful performance of fire departments extending their services to the rural areas.

The resourcefulness of rural people will determine the equipment that can be developed. In some rural communities, social gatherings, dances, bazaars and the like may provide a means for raising the necessary sums for community fire fighting equipment.

Farm fire fighting equipment will vary according to the needs of the community. Roads, fire hazards, central location, etc., should be considered in stationing mobile equipment of the fire fighting company, and water containers should always be kept filled.

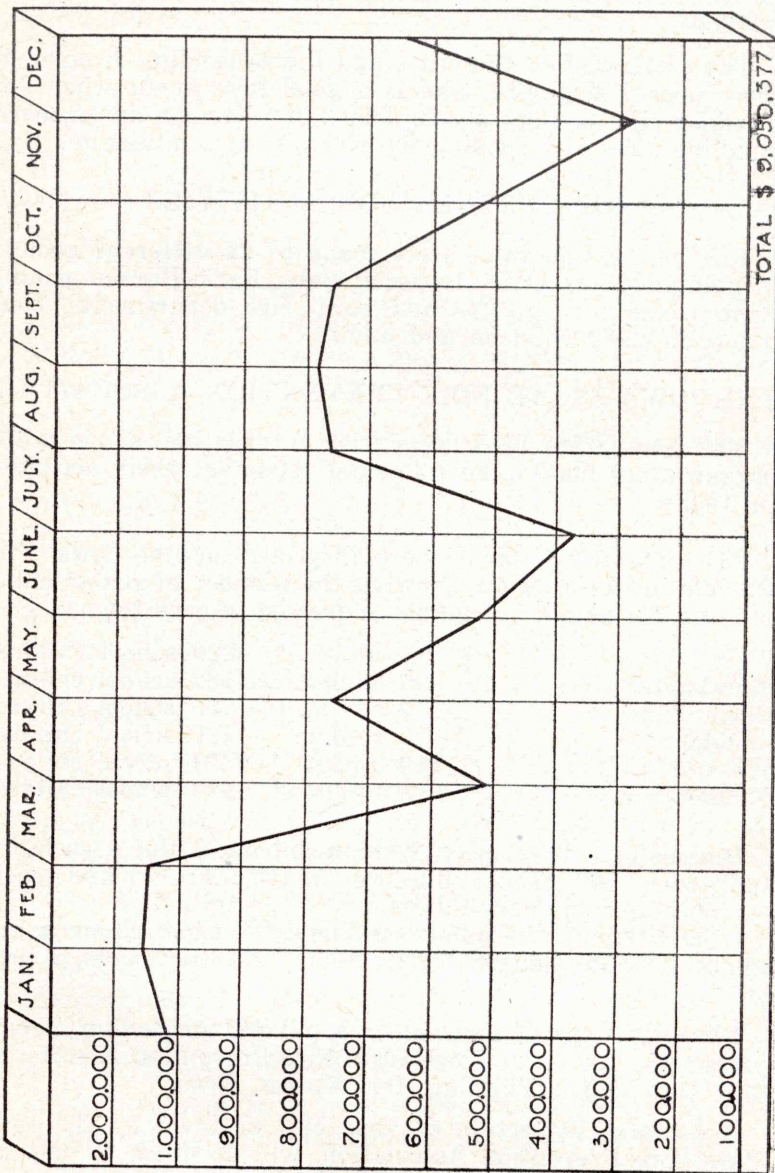
Rural fire fighters should practice just as members of city fire departments train. This includes drills for fires in farm buildings, hay stacks, pastures, range and woodland fires. Local town and village fire departments are usually glad to cooperate in this instruction.

Each farm should have a full complement of such tools as shovels, axes, grub hoes, or mattocks, rakes, burlap, water buckets and barrels, ladders and plows. These should be kept in tiptop shape and handy for any fire that may occur on the farm.

IOWA'S FIRE LOSS
(Compiled by Months)

Month	1943	1944	1945	1946	1947	1948
January.....	\$ 799,327	\$ 530,761	\$ 470,024	\$ 524,575	\$ 672,715	\$1,581,993
February.....	336,615	297,555	583,763	716,172	863,952	1,553,982
March.....	426,540	335,592	529,001	372,764	593,283	515,893
April.....	363,333	329,476	403,527	902,599	694,625	758,127
May.....	265,531	232,149	360,844	591,826	253,212	529,713
June.....	774,499	254,445	218,600	744,894	921,710	366,523
July.....	156,570	244,264	311,850	236,749	323,170	760,393
August.....	214,120	274,173	268,059	288,002	903,119	783,114
September.....	133,455	266,287	392,313	281,674	703,561	753,767
October.....	289,065	661,295	320,091	429,290	647,192	520,334
November.....	336,989	156,909	400,265	458,796	544,595	284,518
December.....	666,531	651,911	679,726	802,639	1,175,939	641,520
	\$4,762,575	\$4,234,817	\$4,938,063	\$6,349,980	\$8,297,073	\$9,050,377

The accompanying graph shows the trend of fire loss by months in 1948:



IOWA FIRE SCHOOL

Iowa's Fire Training program, sponsored by the Iowa State College, Ames, Iowa, has given Iowa firemen an opportunity to keep up with the new and improved fire fighting methods.

The small cost to the cities and towns sending firemen to the school is negligible and is a good investment when you consider the savings accomplished by firemen in properly handling fires and keeping the fire loss at a minimum.

FIRE PREVENTION ACTIVITIES

Fire prevention talks were made to 28 different groups, including schools, civic and social clubs, Farm Bureau groups, farm community groups and rural fire departments, composed of 4,980 children and adults.

THE IOWA STATE FIRE PREVENTION ASSOCIATION

The Iowa State Fire Prevention Association, a non-profit organization, makes the following report of their activities in 1948:

"The following towns were inspected by the Iowa Fire Prevention Association, showing the number of school children and the number of adults addressed in each town:

West Liberty	82 adults	220 school children
Marshalltown	95 adults	1182 school children
Clear Lake	135 adults	700 school children
Sheldon	120 adults	730 school children
Webster City	150 adults	1501 school children
Emmetsburg	150 adults	945 school children

During Fire Prevention Week members of the Association addressed 3,262 school children in twelve addresses and reached 250 adults in four addresses.

In addition to the addresses made to school children and adults, 22 radio stations carried spot announcements, a total of 137 times."

Cities and towns in need of a general inspection, should contact the Secretary, Iowa State Fire Prevention Association 1201 Des Moines Building, Des Moines, Iowa.

A General Inspection of your city or town by the Iowa State Fire Prevention Association, will do much to help reduce the fire loss in your town, by the elimination of fire hazards found by the Inspectors.

NATIONAL FIRE LOSS

1941	\$303,895,000
1942	314,295,000
1943	373,000,000
1944	437,273,000
1945	455,329,000
1946	561,000,000
1947	692,635,000
1948	(Estimated) 711,114,000

Fires destroyed property and resources with an estimated value of \$711,114,000 in the United States during 1948, the greatest destruction by fire in a single year in the history of the nation, the National Board of Fire Underwriters announced.

This record fire loss is 2.7 per cent higher than estimated losses of \$692,635,000 incurred during 1947, the previous record year.

Fire experts point out that these figures reflect only a portion of the total cost of fire. Indirect losses such as business failures, loss of jobs, costs of medical care, and the destruction of irreplaceable natural resources including forests, crops and watersheds, probably caused losses amounting to several times this direct loss.

National fire destruction in December 1948 was estimated at \$69,397,000, an increase of 31 per cent over losses of \$52,949,000 reported in November 1948, and an increase of 1.5 per cent over losses of \$68,361,000 reported in December 1947.

The record fire losses of 1948 climax several years of steady increases in the level of fire destruction. For example, losses in 1948 were 122 per cent higher than the 1942 figure of \$314,849,000, the lowest war time year. For the past ten years, property and resources valued at an estimated \$4,481,512,360 have been destroyed by fire.

Many reasons have been suggested for the great volume of fire losses, including increased values of property, the greater congestions and concentrations of values, and the higher occupancy rate of buildings.

Here are the estimated fire losses in the United States during 1948:

January	\$63,010,000
February	71,521,000
March	74,236,000
April	63,751,000
May	59,256,000
June	54,706,000
July	50,955,000
August	49,543,000
September	49,945,000
October	51,845,000
November	52,949,000
December	69,397,000

CHILDREN HIT HARDEST BY FIRE

Fires and burns account for nearly one-fourth of all fatal accidents to preschool—age boys, according to Metropolitan Life Insurance Company's statistical bulletin. The rate jumps to almost two-fifths among girls. Accidents now outrank every other cause of death for this age group and have shown the least improvement over previous years.

Since 1930, child fatalities from common diseases have declined as much as 75 to 90 per cent, whereas the accident death rate for the same period has dropped only 9 per cent for boys and 19 per cent for girls.

The Metropolitan records also show that in a study of 775 death claims records of insured children who died in accidents in 1946 and 1947, the company found that burns and conflagrations accounted for 213 or 27 per cent of child accidents fatalities, second only to motor vehicle accidents which accounted for 34 per cent. Of the 213 children who died from fire, more than half were trapped in burning buildings.

The U. S. Office of Education reports that 3 out of every 10 fire deaths occur to children of elementary school age and under.

FIRE CHIEFS, MAYORS AND TOWNSHIP CLERKS

For the benefit of those who have been elected, or appointed to the office of Mayor, Township Clerk or Fire Chief during the past year, we call to your attention Chapter 100, Sections 100.2, 100.3, 100.4 and 100.5, Code, Iowa, 1946, which provides that all fires must be reported to the State Fire Marshal within one week of the occurrence of the fire.

In Cities and towns where there is an organized fire department, the Fire Chief is required to report all fires that occur WITHIN the corporate limits of the city or town, if the damage amounts to \$5.00 or more.

If there is no fire department, then the Mayor must make a complete report of all fires within the city or town.

All rural or country fires must be reported by the Township Clerk for the township in which the fire occurs, outside of the corporate limits of any city or town in the township.

ALL questions in the fire report blank, (furnished by this office upon request) must be answered fully, and the amount of damage to the building and contents must be shown, as well as the value to the building, and contents, and the amount of insurance carried on building and contents.

PLEASE send your fire reports in PROMPTLY so that we can keep our records up to date.

FARM FIRE LOSS

There were 425 farm fires reported in 1948, representing a fire loss of \$1,667,803.

We find there were 99 farm barn fires and 180 farm dwelling fires reported representing a fire loss of \$534,146 and \$729,548, respectively, or a total of \$1,263,694, leaving the balance of the farm fire loss, \$404,109, covering other farm structures and miscellaneous farm fires.

FIRE PREVENTION and FIRE PROTECTION will reduce our farm fire loss.

FARM FIRE PREVENTION

It is estimated that fires on farms destroy more than \$100,000,000 annually or enough to build 50,000 barns of \$2,000 each, which if stood end to end would form a wall 500 miles in length.

Farm fires have numerous causes—

Defective chimneys and heating systems
 Sparks from chimney
 Lightning
 Spontaneous combustion
 Careless use of matches and smoking
 Careless use of gasoline and kerosene
 Faulty wiring and misuse of electrical appliances.

Of the known causes, these seven are responsible for almost eighty-five per cent of the total losses from farm fires.

DEFECTIVE CHIMNEYS

Defective chimneys fall into two classes: (1) Those which are not built correctly, and (2) those that have become defective because of lack of care. Chimneys are more often found defective in the attic just under the roof, and this defect may be caused by freezing and thawing, or by the acids in the smoke and soot.

A chimney that becomes too hot to hold one's hand against without discomfort should be carefully inspected and repaired by a reliable brick mason.

All chimneys should be built solid from the ground up and should not depend upon wooden construction for their support. Bracket flues are a poor risk.

Stovepipe openings when not in use should be closed with asbestos or metal flue stops.

Watch your chimney under the roof:

- (1) See that the mortar joints are firm.
- (2) That there are no soft bricks in the flue.
- (3) That the unused openings are properly closed.
- (4) If mortar is bad or the bricks soft and crumbling below the defective part, it is better to build ten layers more than is necessary than to lack one layer of going BELOW the defective point.

THE FURNACE ROOM

The furnace room should be clean, especially near the furnace or stove. A spark from the furnace may ignite combustible material, such as kindling or trash. Wood should not be piled on or near the furnace or under the smoke pipe. Smoke pipes often rust out and permit burning soot to fall beneath the pipe.

Ashes should be placed in metal containers and dumped a safe distance from buildings. Placing hot ashes in wooden containers or piling them too near a wooden building, or partition, has caused many fires.

Ashes in wooden containers, or paper cartons, or piled against wood partitions or buildings, caused 45 fires and a loss of \$28,423 in 1948.

Rubbish against stoves, furnaces and flues caused 34 fires and a loss of \$30,686, and sparks from stoves and furnaces resulted in 18 fires and a loss of \$9,541.

STOVE PIPES

Stove pipes should go directly into good brick chimneys. Rusted out furnace or stove pipes should be replaced with new. No unprotected wood or lath should be permitted within three feet of the furnace. If the distance is less, the surface should be protected by asbestos shield.

FLOOR AND WALL PROTECTION

Metal or asbestos floor boards should be used under the stove to protect the floor from hot coals. They should also be used as a protection if the stove sets too near the wall.

FIREPLACE SCREENS

A fireplace screen should always be used in front of an open fire to keep the sparks from popping out, as well as to keep small children from toddling too near the flames with resultant injury or death.

OIL STOVES

Iowa had 142 defective oil and gasoline stove fires with a loss of \$153,168, in 1948.

Oil stoves are one of the most common causes of home fires. The oil stove should never be filled while lighted.

Never leave the oil stove burning while you are out of the house.

The oil stove should never be placed in front of a window where curtains blowing over the blaze, or draught from the window may cause them to get beyond control.

MATCHES AND SMOKING

Over 600,000 matches are used every minute and millions of cigarettes used every day. Through our own carelessness these have become ringleaders among the causes of farm fires. Each match or cigarette holds the possibility of a disastrous fire.

Matches should not be carried loose in a pocket. They can easily be dropped into flammable material and if stepped on may cause a fire.

Keep matches in metal containers and out of the reach of children. Iowa had 131 fires in 1948 as a result of "Children playing with matches."

Matches should not be used around gasoline barrels or for searching in dark closets. Use a flashlight.

Smoking should not be permitted in buildings containing combustible material. Farm barns usually contain stores of hay, grain, farm tools and livestock, and this not only represents a heavy investment to the owner but also food and material vital to winning the war. Post "NO SMOKING" signs in barns as a warning and be sure that warning is heeded.

SELF-STARTING FIRES

A fire may be self-starting without the use of a flame, spark or a live coal. A fire is caused by the carbon in the material combining with the oxygen in the air. This produces heat, and it may take place so far as to char and then burst into flames.

Oil mops, oily rags, painters' waste, polishing cloths, and even oily or greasy clothes may start a fire spontaneously if left in a pile. To be safe, have a tight metal can for the oily mop and rags, and use it.

HAY FIRES

Green, uncured or wet hay causes many barns to burn by "self-ignition." Whether hay is stored in whole, baled or chopped form, there is always a risk of spontaneous ignition.

Let hay mature well before cutting.

Cured hay upon which rain or dew has fallen should be well dried before storing.

Avoid leaky roofs or frequent wetting of hay after it is in the mow.

ELECTRIC FIRES

Electricity, if properly installed, becomes a safe source of light, heat and power, however, many fires occur because of improper installation and misuse of electricity.

INSTALLATION

Have electric wiring installed by a competent electrician only.

Use only APPROVED material, that is, materials which bear the label of the Underwriters Laboratories, Incorporated.

Require that wiring meet the standards set by the "National Electrical Code."

Any additional wiring should be installed in the same manner and meet the same requirement as the original.

Be careful not to overload circuits; use fuses of correct amperage.

Use cords bearing the label of the Underwriters' Laboratories. Do not run them under rugs, in door jambs or over radiators or steam pipes. Cords should never be used as a substitute for permanent and properly installed wiring.

Disconnect flatirons, curling irons, heating pads, or other appliances when they are not in use.

Too many appliances attached to one outlet may overload the wiring system and cause a fire.

If you need an extension or trouble cable get one of heavy rubber covered cable. Make sure that the guard grips the socket and not the bulb. Look for the stamp of approval of the Underwriters Laboratories, Inc.

GASOLINE - DYNAMITE

One gallon of gasoline, when mixed with air in the proper proportion, has the destructive power of eighty-three pounds of dynamite. The air becomes explosive when it contains one to six per cent of gasoline vapor. Therefore, even a small quantity of gasoline should not be exposed or confined to a room.

A cap and a fuse is used to explode dynamite. In contrast, the vapor from gasoline or naphtha can be explosively ignited from a static spark, caused by striking two pieces of metal together such as metal pan against the stove, or by the friction of rubbing a silk garment; An electric spark caused by the arcing of a switch, or the disconnecting of an appliance plug; An open flame, such as a pilot light, fire in a stove, or smoking. Gasoline vapor is heavier than air and will float along the ground like an invisible stream. Vapors may remain in a basement or a low spot for days. This invisible stream of liquid dynamite may be fired a great distance from the source and then flash back to the main source. Gasoline explosions not only destroy property but too often lives as well. NEVER use gasoline, benzine or other inflammable material for dry cleaning indoors or out.

KEROSENE

Kerosene is not highly inflammable like gasoline, but when heated is capable of giving off explosive vapor like gasoline. This is why kerosene should NEVER be used to revive a fire. Even when a fire is thought to be out there may be live coals in the ashes. This heats the kerosene which vaporizes with the air and as soon as the proper mixture is reached it will ignite from the live coal and explode the same as gasoline.

LIQUEFIED PETROLEUM GAS INSPECTIONS

Our office has made approximately 497 inspections of liquefied petroleum gas installations during the year 1948 and many corrections have been made in improper installations.

We are urging you to check all liquefied petroleum gas installations and be very sure they are made in accordance with the state law, rules and regulations.

A copy of the law will be mailed to any dealer upon request.

Liquefied petroleum gas tanks or cylinders must be placed on a firm fire-resistant foundation and not less than five (5) feet from any opening or openings in the building that are lower than the level of the discharge safety relief.

All liquefied petroleum gas tanks or cylinders must be properly equipped with hoods.

WHAT IS FIRE PROTECTION?

FIRE PROTECTION has been defined as "A water supply and means for efficient distribution of the water to the scene of a blaze.

It is a fire alarm system that will not break down when transmitting an alarm from the location of a fire to the fire department's dispatching headquarters.

It is the auxiliaries of the fire department—the police department, the facilities of the telephone company.

It is the construction of buildings, frame and brick, stucco or steel.

It is a system for public education in fire prevention.

It is the general hazard of all conditions and the total resources of a community that can be mobilized against a fire that could reach disastrous proportions.

You can protect your home from fire by providing fire protection and FIGHTING FIRE WITH FIRE PREVENTION.

MAKE INDUSTRIAL PLANTS FIRE SAFE

There were 49 factory fires in Iowa in 1947, and a fire loss of \$834,145.

1948 shows 61 factory fires and a fire loss of \$801,571, an average of \$13,140 per fire.

Every factory fire represents not only a loss of valuable material and machinery, but a loss to labor, and Management alone can supply many fire safe-guards against accidental fires through

1. Good construction.
2. Complete automatic sprinkler protection.
3. Strong water supplies.
4. Ample extinguishers and small hose.
5. Good watch service.
6. A good fire fighting organization.
7. Elimination of fires causes.
8. Good maintenance of fire equipment.
9. Good housekeeping.
10. Special safeguards for special hazards.
11. Good electrical maintenance.
12. Management and supervision.

HOUSEHOLD DON'TS

The Underwriters' Laboratories offer these ten household DON'Ts, based on over half a century of exhaustive experiments in accident prevention:

1. Don't place a radio close to the bathtub while you are bathing.
2. Don't turn your refrigerator off when you go away on a vacation.
3. Don't leave your bedroom with an electric blanket plugged in.
4. Don't allow children to play with electrical toys unsupervised.
5. Don't fail to ground your television or radio aerial.
6. Don't stick a penny in the fuse box.
7. Don't leave your Christmas tree lights on when not at home.
8. Don't use inflammable cleaning fluids indoors.
9. Don't open a pressure cooker before the steam pressure is exhausted.
10. Don't throw water on an electrical fire. Use a fire extinguisher.

ARSON INVESTIGATIONS

Forty-seven investigations were made in 32 counties, and four confessions obtained in 1948:

County	Investigations	Number of Confessions
Appanoose	1	
Black Hawk	2	
Boone	1	
Buchanan	1	2
Cass	1	
Cerro Gordo	2	
Dallas	1	
Des Moines	2	
Fayette	2	
Franklin	2	
Guthrie	1	
Hardin	1	
Ida	1	
Iowa	1	
Jackson	1	
Jasper	1	
Kossuth	1	
Lee	1	
Linn	1	
Marshall	1	
Montgomery	1	
Muscatine	1	
Page	4	1
Pocahontas	2	
Polk	4	
Pottawattamie	3	
Scott	2	1
Story	1	
Tama	1	
Van Buren	1	
Wapello	1	
Woodbury	1	
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TABLE NO. I

Showing the total number of fires reported by counties. Cities of more than 10,000 population are set out separately. Damage to building and contents is combined.

Counties and Cities	No. Fires	Fire Loss
Adair	9	\$ 9,075
Adams	20	36,400
Allamake	13	10,400
Appanoose	24	47,319
Audubon	11	26,514
Benton	31	55,156
Black Hawk—Waterloo	216	89,691
Balance—Black Hawk County	34	72,422
Boone—Boone	45	154,887
Balance—Boone County	12	194,335
Bremer	1	2,000
Buchanan	28	77,661
Buena Vista	33	72,739
Butler	14	26,385
Calhoun	10	4,944
Carroll	21	15,733
Cass	44	53,097
Cedar	25	24,675
Cerro Gordo County—Mason City	128	45,892
Balance—Cerro Gordo County	5	13,075
Cherokee	14	15,419
Chickasaw	12	144,094
Clarke	7	17,491
Clay	22	27,194
Clayton	18	15,117
Clinton—Clinton	74	58,477
Balance—Clinton County	21	46,188
Crawford	20	47,153
Dallas	13	15,660
Davis	3	26,871
Decatur	10	35,400

TABLE NO. I—Continued

Counties and Cities	No. Fires	Fire Loss
Delaware	7	44,410
Des Moines—Burlington	96	66,792
Balance—Des Moines County	16	45,408
Dickinson	3	2,908
Dubuque—Dubuque	122	121,715
Balance—Dubuque County	17	31,732
Emmet	8	9,975
Fayette	56	71,098
Floyd	28	66,519
Franklin	10	32,600
Fremont	12	25,299
Greene	21	36,393
Grundy	5	3,287
Guthrie	12	40,780
Hamilton	17	51,955
Hancock	7	73,825
Hardin	20	175,035
Harrison	20	32,992
Henry	8	10,434
Howard	19	46,314
Humboldt	5	26,378
Ida	12	11,367
Iowa	16	12,732
Jackson	9	21,350
Jasper	20	56,170
Jefferson	25	46,801
Johnson—Iowa City	59	53,109
Balance—Johnson County	7	21,526
Jones	6	13,420
Keokuk	19	60,260
Kossuth	24	47,903
Lee—Fort Madison	63	468,570
Keokuk	28	13,716
Balance—Lee County	5	7,990

TABLE NO. I—Continued

Counties and Cities	No. Fires	Fire Loss
Linn—Cedar Rapids	175	189,462
Balance—Linn County	35	55,966
Louisa	22	85,704
Lucas	7	1,735
Lyon County	19	25,009
Madison	25	42,107
Mahaska—Oskaloosa	12	185,586
Balance—Mahaska County	4	6,425
Marion	30	121,647
Marshall—Marshalltown	46	52,443
Balance—Marshall County	3	11,444
Mills	9	22,156
Mitchell	3	10,100
Monona	14	35,795
Monroe	11	9,619
Montgomery	34	148,444
Muscatine—Muscatine	60	460,362
Balance—Muscatine County	13	37,230
O'Brien	32	95,995
Osceola	11	4,478
Page	21	30,697
Palo Alto	28	128,600
Plymouth	15	50,628
Pocahontas	6	22,095
Polk—Des Moines	953	1,619,294
Balance—Polk County	28	65,922
Pottawattamie—Council Bluffs	121	63,569
Balance—Pottawattamie County	12	56,400
Poweshiek	33	262,961
Ringgold	6	21,016
Sac	13	33,284
Scott—Davenport	217	214,603
Balance—Scott County	13	53,121
Shelby	20	2,572
Sioux	20	127,617

Counties and Cities

No. Fires Fire Loss

TABLE NO. 1—Continued

Story—Ames	53	62,923
Balance—Story County	29	73,567
Tama	23	61,146
Taylor	12	2,176
Union	5	5,400
Van Buren	12	35,954
Wapello—Ottumwa	49	352,761
Balance—Wapello County	10	18,672
Warren	14	42,080
Washington	10	57,210
Wayne	12	42,768
Webster—Fort Dodge	89	221,572
Balance—Webster County	6	23,075
Winnebago	4	14,800
Winneshiek	12	6,015
Woodbury—Sioux City	370	262,782
Balance—Woodbury County	12	15,435
Worth	7	28,468
Wright	18	42,260
	4,558	\$9,050,377

TABLE NO. II

Showing the kind of property destroyed. Damage to building and contents set out separately.

Kind of Property	No. Fires	Damage Buildings	Damage Contents
Automobiles	602	\$ 53,368	\$ 1,037
Trucks	136	24,655	2,923
Auto accessories—repair shops and tire shops	15	17,190	13,057
Motorcycles and scooter bikes	8	532	0
Awnings	47	2,371	0
Bakeries	7	6,462	478
Banks	5	9,293	4,400
Barns—FARM	99	347,663	186,483
TOWN	47	65,044	14,504

TABLE NO. II—Continued

Kind of Property	No.	Damage	Damgae
	Fires	Buildings	Contents
Beer taverns	38	61,310	70,589
Bridges	5	15,080	0
Cars—Box cars and coal cars	12	2,965	725
Passenger and street cars and buses	28	4,270	70
Car repair shops and roundhouses	2	254	0
Chicken brooders and hatcheries	22	13,553	10,485
Poultry houses	25	7,248	1,960
Churches	33	165,496	34,313
Cleaning and dyeing	16	8,319	6,618
Coal mines	0	0	0
Corn driers	2	1,010	1,025
Corn cribs—granaries	14	27,475	20,900
Creameries—cream stations and dairies	3	1,250	570
Country clubs	1	327,937	38,145
Dance halls	1	0	108
Depots—freight and passenger	6	36,611	6,598
Elevators—seed houses and stores	7	195,000	53,500
Engine and boiler rooms	7	955	2,120
Factories	61	314,384	487,187
Filling stations—oil storage	28	11,023	9,155
Foundries	11	9,329	15,060
Funeral homes	2	2,060	3,140
Garages—private	223	46,281	42,322
Public	50	119,355	208,993
Hay, grain and straw stacks, grain fields and meadows	16	10,127	0
Hog houses	16	17,275	7,959
Homes for Aged—Orphans Homes	5	152,785	10,250
Hospitals and Nurses' Homes	12	2,466	669
Hotels	45	11,710	6,091

TABLE NO. II—Continued

Kind of Property	No.	Damage	Damgae
	Fires	Buildings	Contents
Houses—Apartments	204	108,214	140,581
Fraternity and Sorority	2	365	75
FARM	180	562,066	167,482
TOWN	1,606	747,490	297,800
Rooming houses	16	13,785	5,110
Summer kitchens—wash houses	21	4,010	3,557
Ice Houses	3	7,200	2,122
Laundries	9	15,083	13,432
Lodge halls	22	94,660	55,901
Lumber yards	4	40,089	127,782
Meat markets	6	11,375	25,775
Mills—Feed mills and feed stores	10	12,955	19,289
Flour	0	0	0
Office and office buildings	59	135,200	182,471
Packing plants and stock yards	7	22,773	14,710
Pool halls—bowling alleys	7	3,100	14,770
Printing plants	7	73,895	4,755
Produce houses—locker plants	12	20,537	21,667
Pump and engine houses—power plants	9	6,100	1,500
Restaurants and cafes—lunch rooms	53	28,755	31,861
Schools	22	110,736	27,046
Sheds—Coal and wood	65	7,419	2,271
Machine and tool sheds	30	29,715	44,325
Shops—Barber	2	7,750	2,540
Blacksmith and machine	13	16,180	18,450
Carpenter and work shops—paint shops	20	6,537	8,433
Hair dressing shops	4	111	460
Implement repair shops—stores	12	16,868	68,717
Plumbing and heating	9	7,954	13,608
Shoe repair shops	4	9	541
Smoke Houses	1	179	0
Stores	156	542,016	691,269
Theatres	11	19,145	19,575
Tractors	13	4,828	0
Trailer houses	43	16,446	13,305
Warehouses and storage	118	216,163	572,906
Miscellaneous	141	106,621	66,422
	4,558	\$5,108,435	\$3,941,942
			5,108,435
			\$9,050,377

TABLE NO. III

Cause of Fire	No. Fires	Fire Loss
Adjoining	222	\$ 590,821
Ashes and coal against wood	45	28,423
Auto backfire	60	5,378
Auto wreck	12	1,893
Broken gas line—Alcohol on motor	176	13,833
Blow and oil torches	42	173,633
Bonfires—grass fires	264	145,320
Brooder lamps and stoves	21	17,837
Candle, lamp and lantern carelessness	15	10,950
Children with matches	131	50,113
Cleaning clothing, rugs and floors with gasoline ..	2	745
Clothing too near stove and stovepipe	13	1,504
Compressed gas	16	24,593
Corn drier burners	1	35
Curtains blowing into flames	7	444
Defective auto wiring	303	42,449
Defective electric wiring	241	437,966
Defective electric cords, lamps, appliances and Neon signs	34	16,342
Defective electric appliances	14	1,784
Defective fireplace	11	7,668
Defective flue	244	325,639
Defective and overheated stoves and heating plants	173	556,042
Defective gas stoves and furnaces	22	32,988
Defective oil burners	70	144,068
Defective oil and gasoline stoves	142	153,168
Defective and overheated pipes to stoves and furnaces	86	52,629
Dust in hot air registers	3	4,555
Electric iron-current left on	20	6,140
Films	2	555
Fireworks	2	60
Friction	21	106,149

TABLE NO. III—Continued

Cause of Fire	No. Fires	Fire Loss
Fumigation	0	0
Gas leak	13	84,662
Gasoline and kerosene carelessness	61	112,827
Gasoline and volatile oil explosion	14	53,353
Grease, Paint and Tar—wax and food boiling over	47	14,369
Incendiary	10	3,894
Lightning—rodged	10	23,520
Not rodged	73	543,974
Lightning running in on radio wires	6	12,840
Match carelessness	35	12,180
Rubbish piled against furnace and flues	34	30,686
Short circuit—electric motors, refrigerators, etc.	184	308,864
Smoker's carelessness	464	360,488
Smoking meat	2	1,100
Sparks from engines and locomotives	21	35,803
Sparks from chimney	372	293,005
Sparks from stoves and furnaces	18	9,541
Spontaneous combustion—Coal, dust	5	6,063
Hay, straw, grain, feed	25	141,175
Rags and rubbish	48	108,036
Static electricity	2	2,678
Thawing water pipes	18	27,420
Unknown	519	3,682,179
Using gasoline and kerosene to start fires	11	35,915
Welder's torches	34	55,372
Miscellaneous	117	136,679
	4,558	\$9,056,377

CONCLUSION

In conclusion I want to thank the Fire Chiefs and firemen of Iowa, the social and civic clubs, schools, newspapers, radio stations and all others who have had a part in Iowa's Fire Prevention program.

It is true, our fire loss for 1948 shows an increase over 1947, however, we are hopeful that 1949 will show a reduction in Iowa's fire loss through organized effort on the part of all Iowa, thereby saving life and property.

Urge your City and Town Council to pass fire protection ordinances, make regular inspections of your homes and place of business, call of your Fire Department for advise in the elimination of fire hazards, and inasmuch as FIRE PREVENTION IS EVERYBODY'S BUSINESS, Iowa's Fire Prevention goes right out into the rural districts where we have a large number of rural fire departments doing a mighty fine job—Iowa's 4-H Club boys and girls, and our rural schools are giving Iowa real Fire Prevention service through frequent and thorough inspections and the removal of fire hazards.

Iowa has had 115 deaths, (65 males and 50 females) reported as a direct result of fire.

39 deaths were children 15 years and under.

40 of the total fire deaths for the year occurred in farm homes, caused principally by kerosene and gasoline explosions, using kerosene or gasoline to start fires, and clothing ignited by bonfires.

Is this not sufficient evidence to prove the urgent need for an ALL—IOWA CAMPAIGN AGAINST FIRE?

PREVENT FIRE AND SAVE A LIFE IN 1949?

Respectfully submitted

JOHN W. STROHM, *State Fire Marshal*

DIVISION OF FIRE PROTECTION AND INVESTIGATION
DEPARTMENT OF PUBLIC SAFETY

