



## Cooperative Extension Service

Extension Grain Science and Industry  
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### 1987 SECOND BEST IN RECENT YEARS FOR GRAIN DUST EXPLOSIONS\*

Fourteen grain dust explosions were reported in the U.S. in 1987 according to data compiled by Ralph Regan, FGIS Safety Director, and Robert W. Schoeff, Extension Marketing and Safety Specialist, Kansas State University. This compares to 21 in 1986 and a 10 year average of 21 explosions.

The best news! There were no fatalities and only 16 injuries. Estimated property damage was up from 1986 due to two severe explosions and five falling in the moderate category.

The principal location of the primary explosion was an elevator leg in 8 of 14 explosions.

The cause of the primary explosion remains unknown in 6 of the fourteen cases. Welding & cutting, bearing failure, lightning, fire from a choked leg and foreign material were identified as other probable causes.

Corn dust was involved in 12 of 14 cases, corn screenings in one and mixed feed in another.

Most of the explosions occurred in a grain elevator, 10 of 14, while the remaining four were in feed mills.

Explosions occurred in 10 states; 2 in Ohio, Illinois, Iowa and Missouri and one each in 6 other states. Please note there were none reported in Nebraska for the first time since 1972 and 1971.

It is hoped this data will be useful to all who are concerned about safety and preventing grain explosions. Appreciation is expressed to the many people who helped provide this information which is based on voluntary reports.

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January 15, 1988



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#### REPORTED GRAIN DUST EXPLOSIONS IN U.S. - 1987

<u>DATE</u>	<u>COMPANY AND ADDRESS</u>	<u>FACILITY</u>	<u>DAMAGE*</u>	<u>KILLED</u>	<u>INJURED</u>
Jan. 8	Landmark Farm Bureau Oxford, OH	Grain Elevator	Moderate	0	0
Jan. 13	Fieldale Farms Feed Mill Baldwin, GA	Feed Mill	Moderate	0	0
Jan. 31	Central Soya Co. Decatur, IN	Grain Elevator	Minor	0	0
Feb. 13	Fmr. Coop Elevator Co. Buffalo Lake, MN	Grain Elevator	Moderate	0	0
April 3	ADM Co. Burlington, IA	Grain Elevator	Severe	0	5
May 28	Cargill, Inc. Chicago, IL	Elevator	Moderate	0	0
July 29	Countrymark Lima, OH	Feed Mill	Severe	0	5
Aug. 7	Iroquois Farmers Elevator Iroquois, IL	Elevator	Minor	0	0
Sept. 10	Northwood Coop. Elevator Northwood, IA	Elevator	Moderate	0	0
Sept. 11	Pilgrim Industries Pittsburg, TX	Feed Mill	Minor	0	0
Sept. 18	ADM-Growmark St. Louis, MO	Elevator	Minor	0	0

KSU, County Extension Councils and U.S. Department of Agriculture Cooperating.

All educational programs and materials available without discrimination on the basis of race, color, national origin, sex, or handicap.

Sept. 19	Prairie View Enterprises Bethany, MO	Elevator	Minor	0	3
Oct. 29	Country Mark Silver Grove, KY	River Elevator	Minor	0	0
Nov. 12	BilMar Foods Holland, MI	Feed Mill	Moderate	0	3

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SUMMARY

TOTAL NUMBER  
OF INCIDENTS - 1987

14

TOTAL  
KILLED    INJURED

0            16

\*Minor    - Less than \$50,000  
Moderate - 50,000 - \$500,000  
Severe    - Over        \$500,000

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January 15, 1988  
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\*This report is subject to revision as new information is received.