

# Farm and Ag Risk Management

# Our Session Today

- What is Risk Management
- What is Risk
- Types of Risk
- A brief history of RM
- The RM Process
- RM “Rules”
- Discussion Points With Clients
- Session Recap

# Risk Management

- What is your definition?
- What do you mean when you tell your prospect/client that you want to take a look at their operation utilizing a Risk Management approach?
- What do they expect you to do or think you mean?

# Risk Management - Defined

“Risk Management is a scientific approach to dealing with pure risks by anticipating possible accidental losses and designing and implementing procedures that minimize the occurrence of loss or the financial impact of the losses that do occur.”

Fundamentals of Risk and Insurance

Emmett J. Vaughan

Therese Vaughan

# When You Were a Child...

- Parents taught you
  - Don't run with scissors
  - The stove is hot
  - Wet paint
  - Treat every gun as loaded
- Sports taught you
  - Skateboarding – helmets & pads
  - Batting helmets – soccer shin guards – protective padding of all sorts

# Ben Franklin

- A stitch in time saves nine
- He that lives upon hope, dies fasting
- Don't throw stones at your neighbors, if your own windows are glass
- No gains without pains
- Haste makes waste

# Why Study RM?

- We need an established basis for:
  - Protecting one's person and assets
  - Managing one's business

We need a specific and defined process which one can use to arrive at a set standard of practices to avoid, transfer, maintain, retain, share RISK.

# SO...What Is Risk

- A condition of human existence
- Uncertainty about an outcome
  - Could be a favorable outcome
  - Could be an unfavorable outcome
- Risk in insurance =
  - A peril insured against
  - Person/property protected by insurance



# What Is Risk

- Loss and Indeterminate Outcome
- Loss
  - If we know for certain that a loss will occur, then there is no risk
- Indeterminate Outcome
  - At least two outcomes – one of which is not favorable

# What Is Risk - Defined

- Uncertainty concerning the occurrence of a loss

Principles Of Risk Management and Insurance

George E. Rejda

- A condition in which there is a possibility of an adverse deviation from a desired outcome that is expected or hoped for.

Fundamentals of Risk and Insurance

Emmett J. Vaughan

Therese Vaughan

# What Is Risk?

- A condition of the human existence
- Uncertainty of outcomes
- Loss & Indeterminate Outcomes
- Adverse deviation from desired outcomes

# Types Of Risk

- Financial vs. Non-Financial
- Static vs. Dynamic
- Fundamental vs. Particular
- Pure vs. Speculative

# Financial vs. Non-Financial

- Since *RISK* in its broadest sense includes all situations in which there is an exposure to adversity almost all losses will have some financial impact
- But that financial impact may be considered negligible or incidental by the client and so could be categorized as Non-Financial

# Static vs. Dynamic

- Dynamic Risks – those resulting from changes in the economy
- Static Risks – losses that would occur, even in the absence of any economic changes

# Fundamental vs. Particular

- Fundamental Risks – one that affects the entire economy and/or large numbers of persons or groups
- Particular Risks – one that affects a particular individual(s) and not the entire community

# Pure vs. Speculative

- Pure Risk – situations wherein there are ONLY the possibilities of loss or no loss
- Speculative Risk – situations in which either a profit or a loss is possible



# Uncertainty vs. Risk

- Distinction between the two terms
  - Uncertainty = a state of mind characterized by doubt
    - Difference between certainty & uncertainty
  - Risk = a condition or combination of circumstances in which there is a possibility of loss – this then creates “uncertainty” when the actual risk is recognized

# Degrees of Risk

- More Risk vs. Less Risk
- Actuarially speaking - Your probability of death:
  - At age 52 is approximately 1%
  - At age 79 is approximately 10%
  - At age 97 is approximately 50%

At age 79 we would view the “risk” of death as greater than that at age 59 but less than that at age 97

# Russian Roulette & Risk

- Two bullets vs. one, where is there more risk?
- Four vs. three, where is there more risk?
- Six vs. five, wherein is the risk?

# Russian Roulette

## Outcomes – Certainty – Risk

- 0 Bullets = ONLY one outcome (favorable) ergo NO uncertainty and NO risk
- 6 bullets = ONLY one outcome (unfavorable) ergo NO uncertainty and NO risk
- 3 bullets = greatest uncertainty & greatest variable for two different outcomes

# Risk vs. Perils vs. Hazards

- Oftentimes used interchangeably, RISK as previously defined is:
- Uncertainty concerning the occurrence of a loss

Principles Of Risk Management and Insurance

George E. Rejda

- A condition in which there is a possibility of an adverse deviation from a desired outcome that is expected or hoped for.

Fundamentals of Risk and Insurance

Emmett J. Vaughan

Therese Vaughan

# Risk vs. Perils vs. Hazards

- Risks = conditions or circumstances in which there is a possibility of loss – this then creates the uncertainty when the actual risk is determined
- Perils = a cause(s) of loss
- Hazards = conditions that may create or increase the chance of loss arising from a given peril
  - Physical
  - Moral
  - Morale

# A Brief History

- Generally used first in 1950's in an article in the *Harvard Business Review* (1956)
  - Referred therein as a determination that someone within an organization should be responsible for “managing” the pure risks of the organization
  - Many at this time already had on staff an “insurance manager”

# A Brief History

- Initial attempts were managing the purchase of insurance to deal with risk
- Shift to actual Management of Risk probably due to:
  - Development and growth of decision theory
    - Cost/benefit analysis
    - Expected Values



Defining It Better

# 3 Separate Specialties

- Decision Theory
- Risk Control
- Risk Financing

# Decision Theory

- Made up of four distinct elements
  - Acts
  - Events
  - Outcomes
  - Payoffs

# Risk Control

- The techniques used to minimize – at the least possible costs – those risks to which the organization is exposed.
- Comprised of two parts:
  - Risk Avoidance
  - Risk Reduction

# Risk Control; i.e. Avoidance

- Normally used only in instances where exposure has catastrophic potential and the risk cannot be transferred or reduced
- Essentially the last resort to be used
- Otherwise a firm may not be able to attain its primary objectives
- Used when both frequency & severity are determined to be too high & cannot be reduced

# Risk Control; i.e. Reduction

- Consists of all techniques used to reduce the likelihood of loss or the severity of those losses that will occur
- Loss Prevention & Loss Control live here
- Two different approaches therein:
  - The engineering approach
  - The human behavior approach

# Risk Financing

- The techniques used focus on arrangements designed to guarantee the availability of funds to meet losses that do occur
- Comprised of two parts
  - Risk Retention
  - Risk Transfer

# Risk Financing; i.e. Retention

- Most commonly used
- May be conscious or unconscious
- If nothing is done, then it is **retained** risk
- May be voluntary or involuntary
  - Voluntary is a decision to retain rather than to avoid or transfer it
  - Involuntary is when it is not possible to avoid, reduce or transfer to another...uninsurable risks



# Risk Financing; i.e. Transfer

- Purchase of insurance contracts
- Hedging
- Contractual agreements
  - Hold Harmless
  - Subcontracting

# RM as a Business Tool

- Better Insurance purchasing
- Transfer vs. Retention & cost effectiveness
- Reduced expenses through loss control
- Loss prevention

# RM As A Business Tool

- Different than insurance management
- RM is broader as it deals with insurable and uninsurable risks and the application of the appropriate techniques to manage both
- The Risk Manager asks..."which risks **must** I insure" rather than "which risks should I retain?"

# RM's Contribution To Business

- Managing pure risks so the organization can afford to pursue all of its other goals
- Helps to control the costs of the organization
  - Better Insurance purchasing
  - Transfer vs. retention & cost effectiveness
  - Reduce expenses through risk control
  - Loss prevention

# The RM Process

# The Risk Management Process

- Determination of objectives
- Identification of risks
- Evaluation of risks
- Alternatives and selecting the risk treatment
- Implementing the decision
- Evaluation and review (monitoring)

# Determine The Objectives

- What does your insured want POST LOSS?
- What does your insured want PRE LOSS?

# Determination Of Objectives - What Is It That Management Wants From Its Risk Management Program?

- Post Loss

- Survival
- Continuity
- Earnings stability
- Continued growth
- Social responsibility
- Others?

- Pre Loss

- Economy
- Reduction in anxiety
- Meeting externally imposed obligations
- Social responsibility
- Others?



# Identification of Risks - Tools

- Get as thorough an understanding of the business as possible using:
  - On site visits
  - Analysis of documents
  - Flow charts
  - Internal communication
  - Questionnaires
  - Exposure checklists
  - **Insurance policy checklists**
  - Others?

# Evaluation of Risks

- Relative Rankings include their importance based upon severity wherein ALL losses that would represent financial catastrophe are ranked the same. We would want to consider:
  - Critical Risks
  - Important Risks
  - Unimportant Risks

# Alternatives In Treatment

- The choice comes down to “which technique should be used with each risk?”
- Is there a formal or informal policy in place
  - Formal = more rigid & fewer decisions to be made
  - Informal = more decisions and more latitude
- Considerations could include:
  - Potential size of loss and its probability
  - Resources available should loss occur

# Implementation

- If made to RETAIN the risk
  - With/without a fund
  - With/without a reserve
- If LOSS PREVENTION the risk
  - Proper program designed and implemented
- If to TRANSFER the risk
  - Insurance
  - Contractual

# Evaluation and Review

- MUST be done and is never ending
- Things always change: new risks appear while old disappear
- Financial considerations may have changed
- Mistakes sometimes are made
- HOW to do this?
  - Repeat each of the prior steps in the new light
  - Implementation and follow-up is verified

# Risk Management Rules

- Do NOT risk more than you can afford to lose
- Consider the odds
- Don't risk a lot for a little

# Risk Characteristics

	<b>High Frequency</b>	<b>Low Frequency</b>
<b>High Severity</b>	OUCH!	Insurance
<b>Low Severity</b>	Retention & Reduction	WHAT, me worry?

# Insurance – the LAST Resort

- More often than not the choice is
  - to BUY or NOT to BUY ?
- Many Buy too little
- Few Buy too much



# Large Loss Principle

- Essential coverages FIRST, i.e. the probability that a loss may or may not occur is less important than the possible size of the loss
- In other words – transfer those risks that the customer simply cannot afford to incur
- NOT “can I afford it” but rather “can I afford to be without it?”

# Client Discussion Areas

Using RM Principles

# PRACTICAL RM THOUGHTS

## Loss Prevention Topics

- Hiring Practices
- Independent Contractors
- OSHA Requirements
- Auto Safety
- Silo Safety

## Loss Prevention Topics

- Combine Risks
- Tractor Safety
- Other Vehicles
- Chemical applications
- Manure Management

# Hiring Practices

- What is their process
- Do they verify status...How
- Use of the I-9 form – acceptable documentation
- Applications used – FLCs used
- E-Verify
- Job descriptions
- Skilled vs. Unskilled laborers
- What do they ask

# Independent Contractors

- Are they???
- SS-8 <http://www.irs.gov/Forms-&-Pubs>
- Behavioral Control
- Financial Control
- Relationship of Parties
- Workers' Compensation provided by IC
- CONTROL IS KEY

# OSHA Items

- OSHA Form 300
- Even when your customer is RIGHT...the downside of it all can be debilitating
- MORE OSHA: Tractors – PTOs – Harvesters – ATVs – General Vehicle Safety – Heat Illness – Ladders & Falls – Grain Bins & Silos – Pesticides – Respiratory – Zoonotic Infections

# Auto Safety

- MVR checks
- Cell Phones/Texting
- Vehicle check outs
- Passenger Van Training
- Safety Inspections
- Backing Techniques
- Winter Driving
- Proper Signage
- Drugs & Alcohol
- Seat Belts

# Silos & Bins Safety

- Augers & Conveyors
- Structural reviews
- Fall protection
- Confined spaces
- Communications
- Respirators
- Ladders
- Hatch security
- Suffocation
- Rescue Equipment



# Combine Risks

- Safe Stop
- Blockage clearing
- Appropriate training
- Entanglement concerns
- Falls, slips, trips and more
- Dust – Fires – Overhead lines
- Hearing protection – eye protection – etc.

# Tractor Safety

- ROPS
- Guards fitted properly
- Operator familiarity
- Age limitations
- Hearing protection
- Brake functionality
- Starting options
- Power Lines
- Regular inspections
- Load ratings

# Other Vehicles

- ATVs
  - # of wheels
  - Rollovers
  - Multiple riders on single passenger ATVs
  - Age restrictions tied to HP and/or CC sizes
  - Appropriate attachments
  - Where to safely operate
  - Appropriate riding gear

# Chemical Applications

- Register of Hazardous Materials used
- Appropriate labeling
- MSDS Sheets
- Proper Training of ALL employees using
- Safety Equipment
- Flammable storage
- Spill procedures
- Regular inspections
- Suitable storage

# Manure Management

- Underground – Open Lagoon – Above Ground
- Ventilation
- Spillage and overflow
- Children, animals and strangers
- Equipment operation
- Methane – Ammonia – CO<sub>2</sub> - Hydrogen sulfide –
- Agitation increases
- Pinch points
- Respiratory equipment
- Warning signage

# Thank You



- Casey Roberts, ACSR, AFIS, CIC
- Laurus Insurance Consulting
- Ph: (707) 477-0913
- [casey@laurusinsuranceconsulting.com](mailto:casey@laurusinsuranceconsulting.com)