DECK SAFETY AWARENESS

The Virginia Building and Code Officials Association
“Decks cause more injuries and loss of life than any other part of the home structure. Except for hurricanes and tornadoes, more injuries may be connected to deck failures than all other wood building components and loading cases combined.”

-Don Bender, Director of Wood Materials and Engineering Laboratory at Washington State University
Each year many people are injured as a result of deck failures that may have been avoided by performing basic preventive maintenance.
DECK SAFETY

Statistics*

+ 40,000,000 decks in the US over 20 years old
  × If 1% unsafe, 40,000 potential decks unsafe

+ 2000 – 2006 Deck Related Incidents
  × 30 deaths
  × 350 injuries
  × 75% of persons in a deck collapse likely to be killed or injured

*Source North American Deck and Railing Association
Deck failures can occur for various reasons

- Faulty Construction Methods
- Improper or Unsuitable Materials
- Lack of Maintenance
As a home owner there are some simple things you can do which may help prevent unexpected problems with your deck.
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- Decks are subject to multiple forces (loads)
  - Gravity
  - Lateral
  - Uplift
A properly constructed and maintained deck will be able to withstand each of these forces and provide you with a safe and stable addition to your home.

The following tips will help you identify potential issues that may cause a problem:
Tip #1

Check support posts and beams for rot, splitting or abnormal movement.
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- Tip #2
  - Closely check the attachment points between the house and deck.
Tip #3

+ Check all fasteners, bolts, brackets, etc., for rust and corrosion. Look for improper fasteners.
Tip #4

Check all guards and rails to be sure they are sturdy and well secured.
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Tip #5

Use grills, heaters and outdoor fire pits with care and be sure to observe all rules regarding their use.
Critical Deck Connections

Ledger Attachment
Critical Deck Connections

Joist-to-Ledger
CRITICAL CHECKPOINTS

Critical Deck Connections

Beam-to-Post
CRITICAL CHECKPOINTS

Critical Deck Connections

Railing Post-to-Deck Framing
CRITICAL CHECKPOINTS

Critical Deck Connections

Stair Tread-to-Stringer
CRITICAL CHECKPOINTS

Critical Deck Connections

Stair Stringer-to-Deck Framing
CRITICAL CHECKPOINTS

Critical Deck Connections

Post-to-Concrete
Congratulations!
By checking each of these critical areas, you will help to ensure another safe summer season for your family and friends.
Thanks for helping to observe May as DECK SAFETY AWARENESS MONTH In VIRGINIA

Virginia Building and Code Officials Association

Gloucester County Building Inspections Dept.
6582 Main Street
P.O. Box 329
(804) 693-2744
www.gloucesterva.info