Accidents Waiting to Happen

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What accidents are waiting to happen?
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- Typical HGPT-4:
  - The image depicts several potential safety hazards:
    - 1. The child is standing on a table, which poses a risk of falling.
    - 2. The table has sharp edges, which could cause injury if the child were to fall against it.
    - 3. The lamp on the table is within the child's reach, and there's a possibility of it being knocked over.
    - 4. The window or door is open, and the child could potentially try to climb or lean out of it.
    - 5. Small objects (like the bottle caps) are present on the table, posing a choking hazard for the child.
    - 6. The metal shelf unit to the left seems to have objects that might be fragile or could be knocked over.
    - 7. The electric socket near the floor is uncovered and could be a hazard if the child attempts to insert objects into it.

- It's essential to always supervise children, especially in environments with potential hazards like these.
Chen Wei’s model

• Her model encodes the image into the following words:

• A photo of little boy standing touching touching lit lamp with a tan lamp it on black table containing including toys toys a frames beside window alongside a portrait artwork frame above curtain and curtain window wooden floor sheer curtains right curtain wearing red red red tshirt sleeves panties leather swimsuit child shade male westchester archipelago homemade apartment lamp lamp lighting shadows barefoot lamp lamp

• Chen inputs this “scrambled caption” into a language model with the question: "What accident is waiting to happen based on these keywords?"
Chen’s model gives the answer

- Based on the key words, a few potential accidents that could happen in this image:

- 1. The boy is standing close to and touching a lit lamp on the table. He could accidentally knock it over, breaking the lamp and potentially causing a fire or burns.
- 2. With toys scattered on the table, the boy could inadvertently pull the lamp cord and bring it crashing down.
- 3. As he’s barefoot on a wooden floor, the boy risks stepping on toy pieces and getting hurt.
- 4. Playing with the lamp shade he could tear it or hurt his fingers on the bulb.
- 5. The window beside the table has sheer curtains that could also catch fire if the lamp fell against them.
- 6. If the lamp cord is damaged, exposed wires could electrocute the child.
- 8. Climbing on furniture to reach the lamp, the boy could fall and injure himself.

- Overall, the keyword descriptors suggest an unsupervised child playing unsafely with a lamp, surrounded by hazards and at high risk for an accidental injury, fire, or dangerous fall. The scene creates tension anticipating the imminent accident about to occur due to the perilous situation.