We must build dikes of courage to hold back the flood of fear. Martin Luther King, Jr.

We fear violence less than our own feelings. Personal, private, solitary pain is more terrifying than what anyone else can inflict. Jim Morrison

We are hard-wired to feel fear. The amygdala, the part of the brain charged with sorting through sensory input from the environment and issuing the alarm, "Danger! Danger! Be Very Afraid!" evolved long before the neocortex, the part of the brain charged with reason and logic. An almond-shaped bundle of neurons located near the brain's center, the amygdala prompts us to act first and analyze what happened later. Not only is the fear circuitry in the amygdala older, in evolutionary terms, than the reasoning circuitry in the neocortex, it is also more powerful. While the neocortex has a limited number of neurons running to the amygdala, the amygdala has a host of one way neurons running to the neocortex. In simple terms, this means that the amygdala's alerts like, "Yikes! Take action now! There's a bear over there!" can easily override the neocortex's reasoned responses like, "False Alarm – that's not a bear, it's a trashcan."

From an evolutionary perspective, the amygdala's predominance kept our ancient ancestors alive. People who immediately ran from red and yellow striped snakes were much less likely to get bitten than their more cerebral peers who took the time to note the snake's color sequence and test it against the poem "Red to yellow, kill a fellow; red to black, venom lack." This fear based architectural set-up still comes in handy when we face actual threats. In emergencies, speed is important and the amygdala is designed for speed. The amygdala can respond to a potential threat, prompting a fight, flight or freeze response in less than 100 milliseconds, compared to the neocortex which takes approximately 500 to 600 milliseconds to process an experience and bring it into consciousness.

Not only does the amygdala dominate the neocortex, it comes online first and plays an important role in memory development, patterning experience into "maps" or mental models that determine our unconscious beliefs and expectations. Whenever we have an experience, we have a bodily sensation and there is an emotional surge coupled with perceptions of what's happening. What fires together wires together and survives together. Our immediate environment and the way our care takers responded to us as infants determine our individual mental models. When we were infants, we were completely dependent on our parents and caregivers for survival. If our caretakers were present to our needs, understood our cries and were able to provide a safe, calm, environment, we formed a mental model that the world is a safe place. In contrast, if our caretakers ignored or consistently misunderstood our cries, or if our environment was tinged with violence, we formed a mental model that the world is not safe. These mental models shape the way the amygdala processes information. If the mental model frames the world as unsafe, the amygdala is primed to respond accordingly.

Add to this, memories formed before we are four or five get stored as implicit memories. They don't come into our awareness with a beginning, middle and end or a time date stamp that lets us know that they happened in the past. Implicit memories drift into our unconscious awareness as physical and emotional stimuli joined with corresponding behavioral impulses as if

they are happening now. If, in its scanning of the environment, the amygdala picks up something that starts its "Danger" warning, it bumps the neocortex offline. This leaves us to scramble, lost in the emotional and physiological experience of that not safe past as if it is happening now. These old mental maps can create distortions and ruts in our thinking so that we feel frightened, withdrawn and confused without knowing why. This is why you may feel desperate and terrified, or angry and aggressive when your partner doesn't understand what you are trying to say, ignores you or rejects you. This is also why people who were abandoned, emotionally or physically, as children often run from potentially healthy relationships.

Guided by outdated mental maps, the amygdala is unable to tell the difference between real and imagined danger. As a consequence, we are primed to worry about anything from public speaking, to success, to an alien invasion. Fear laden mental maps can make us afraid to take new risks and learn new things. They may also drive us to use unhealthy coping methods such as obsessive compulsive behaviors, substance use and abuse, eating disorders, and dysfunctional spending patterns to drown out the fear.

The good news is that we can rewire our brains. Our brains can constantly make new neural connections. You just have to be willing to have new experiences. Therapy, with a therapist or counselor you feel comfortable and safe with, can help you rewrite the memory scripts that told you that relationships aren't safe, and that people don't listen, care, or understand. A therapist can help you become aware of the unconscious, irrational impulses that stem from the amygdala and help you learn to question and dismantle them. A therapist can help you face frightening memories as they come up and remind you that they happened a long time ago, that you are no longer totally dependent on others for your survival, and that you have options and abilities that you didn't have back then. A therapist can also empower you to take action in the present to challenge those old beliefs about your inherent powerlessness and fragility.

Meditation practices can help learn to regulate your body. When you meditate, your heart beat slows down and you can tune into what is actually happening in your body, right now. Meditation can help you ground yourself so that you can stay present in the here and now and make choices about how you'd like to respond rather than simply collapsing, exploding into anger or withdrawing as you learned to do in the past. Through meditation, you can learn to see yourself directly, through nonjudgmental, loving and accepting eyes.

No matter how damaged, how wounded, how traumatized you were as a child, no matter what mental maps got recorded, therapy and meditation can help you find safety from the inside out.

*To ask Regina a question, check out upcoming workshops, or check out her books and other writing, go to:* <u>www.ReginaSewell.com</u>. This column originally appeared in Outlook: Everything is Political.