New Chip Technology

EMV is designed to reduce in-store fraud. The chip in the EMV card is designed to prevent most counterfeit card fraud because the information it contains is dynamic. When used in stores, the chip “talks with the terminal” to authenticate the card and complete the transaction. The chip generates a unique, one-time code that is difficult to counterfeit but is needed for each transaction to be approved. If the magnetic stripe on a card is used, then the terminal is reading static account information that can be easily copied to make a counterfeit card.

The U.S. is behind the times. Most countries—including Canada and Mexico—have required microchips in credit and debit cards for some time (80 countries so far, with more than two billion chip payment cards in use). The United States is catching up; by the end of 2015 it is estimated that 70 percent of credit cards and 40 percent of debit cards in the U.S. will have embedded security chips called EMV (for Europay, MasterCard and Visa). EMV cards will eventually replace magnetic stripe cards completely.

Larger retailers are already using chip technology. Most large retailers—Walmart, Target, and Home Depot—have already upgraded their terminals to accept EMV cards, but many small and independent businesses will continue to use magnetic-stripe terminals to “swipe” a transaction the old-fashioned way.

Fraud liability shifts from issuer to merchant. It is important to understand that when fraud occurs on a magnetic-stripe card, the issuer (Magnolia Federal Credit Union in this case) bears the cost. However, with the EMV liability shift on October 1, 2015, the fraud liability cost can shift to the merchant, depending on who is the weakest link in a transaction. If an EMV chip card is “swiped” at a merchant starting October 2, all fraud costs related to that transaction will shift to the merchant because it is not using the chip to authenticate the card. If the merchant uses an EMV terminal with an EMV card, then the fraud liability will stay with the issuer (the fraud will be greatly reduced, however). This liability shift has no effect, however, on Visa’s Zero Liability policy that protects you from unauthorized use of your card or
account information.

Magnolia EMV cards are almost ready. Some consumers have already received new credit and debit cards with the EMV chips (identified by a small metallic square). Magnolia FCU’s EMV cards are in the final stage of development, and will be issued to members in the coming months. When you “dip the chip,” the transaction may take longer. You will have to wait for the cashier to ring up the transaction before you can use your EMV card. You insert the card into the reader, “dip the chip,” or, in some cases, "tap" the card on a flat reader and leave it in the reader until the transaction is complete. It may take a few moments longer than the old swipe card, but the transaction will be more secure. Signing or entering a PIN for the transaction depends on your bank. Magnolia Federal Credit Union is adopting the “U.S. Standard” option whereby the terminal will default to requesting a PIN, but you may still choose to do a signature-based transaction and circumvent entering a PIN.

Don’t forget your card. We are accustomed to quickly swiping our cards, then putting them back in our wallets. Now that we’ll be required to leave new EMV cards in the terminal for the duration of the transaction, there’s the likelihood that some of us will forget to remove the cards after the transaction is complete.