

## **Attachment 10b**

### **Understanding Coding for Technological / Telecommunication Barriers**

#### **Introduction**

The Ci3 2013 BRFSS survey programming includes new four-digit disposition codes. Disposition code changes resulted from the move toward the standards of the American Association of Public Opinion Research (AAPOR), the increased diversity of types of telephones in the sample, and the rapid changes in telephone usage.

This document provides a quick overview of the differences between Technological Barriers and Telecommunication Barriers, and Phone Circuit Messages and Answering Device Messages. It also provides examples of Phone Circuit messages and Answering Device messages with comments on their proper coding. The number and variety of messages that phone companies use are changing rapidly. The lists provided here are not comprehensive, but they are intended to give an overview of coding for commonly heard messages. This list was developed following discussions with data collectors at the 2013 BRFSS conference.

#### **Definitions of Technological Barriers, Telecommunication Barriers, Phone Circuit Messages and Answering Devices**

One challenge with BRFSS disposition codes is the differentiation between a Telecommunication Barrier [5150] and a Technological Barrier. [5400]. The differences between these codes are based on whether the respondent initiates the barrier (Telecommunication Barrier) or the barrier is due to something outside of the control of the respondent (Technological Barrier). Technological Barriers may be due to the carrier or problems in the circuits or with the type of telephone.

Keep in mind that a Technological Barrier will be coded as ineligible while a Telecommunication Barrier is coded as unknown eligibility. Also remember that clear messages for non-working numbers should be coded as final disposition nonworking number (4300) or possible nonworking number (interim code 5300). Personal answering devices should not be coded as a Technological Barrier.

## Telecommunication Barriers vs. Technological Barriers

**Technological Barrier (5400 or 4400):** A Technological Barrier is either:

- a) a telephone # that does not behave like a telephone line but instead acts like some other device (pager, alarm system, etc.); or
- b) a NON-connecting telephone line that a telephone owner cannot answer (fast busy, circuit busy, etc.); or
- c) a line with an ambiguous phone circuit message.

**Telecommunication Barrier (5150 or 3150):** A Telecommunication Barrier is a device or service on the end of a telephone line put by the telephone line owner to block incoming calls. This type of barrier includes call blocking devices or requirements for codes prior to connection but does not include personal answering devices (such as voice mail). Telecommunication Barriers result from screening by potential respondents.

**Code a result as a telecommunication barrier only when there is assurance that the respondent put the block on the phone line. Otherwise, code the call as a technological barrier.**

Interviewers often encounter messages from a phone company, or a phone circuit message. Phone circuit messages are not specific to a potential respondent and DO NOT ALLOW INTERVIEWERS TO LEAVE MESSAGES. Answering devices, on the other hand, do allow for interviewers to leave messages, unless the mailbox is full. Answering devices are set up by respondents or are specific to their telephone numbers. Even if a recorded message is heard on the answering device, it is still specific to that number and should be coded appropriately.

## **Phone Circuit Messages vs. Answering Devices**

***Phone Circuit Messages:*** A phone circuit message is produced by a telephone company. It is not specific to a potential respondent. Phone circuit messages do not permit interviewers to leave messages for potential respondents. Phone circuit messages may result in technological barrier dispositions (5400 or 4400), nonworking number dispositions (5300 or 4300) or other ineligible dispositions.

***Answering Devices:*** Answering devices must allow interviewers to leave messages or indicate that a specific mailbox is full. An answering device is specific to a potential respondent, even if it is a recorded message. For example, a recording which indicates that the interviewer has reached a specific number and allows the interviewer to leave a message is an answering device, not a phone circuit message. Answering devices may indicate that the number dialed is a household in the landline telephone sample. Codes for answering devices are 5220/2220 for landline answering devices which are known to be households and 5140 and 3140 when the answering device is in the cell phone sample or when it is not known that the answering device is connected to an eligible household.

**Code a result as an answering device only if the interviewer has the potential to leave a message (or if the mailbox is full). Do not code a household answering device for a number in the cellular telephone sample.**

## Examples of Messages and Coding Suggestions

Sometimes it is difficult to tell if a number is non-working or if there is a technological barrier. If the number is identified as purely non-working (you get an operator message that says it's non-working) then use a non-working disposition code (either final non-working [4300] or possible non-working [5300]). CATI centers should define how strong the message needs to be to decide between final [4300] and possible [5300] non-working. The table below illustrates some common phone circuit messages that have been reported by states in the recent months. We have provided suggested coding for each message. This list is not exhaustive and it is likely that data collectors will continue to hear ambiguous messages in the future. Keep in mind the general rule that technological barriers are outside the control of the respondents, while telecommunication barriers are specifically placed by the respondents to block calls.

Phone Circuit Message	Comment	Suggested Coding
You have reached the (XXX) Telecom voice messaging service. If you have a mailbox on this system and would like to access it now, enter your 10-digit phone number, then press pound.	This is a number to a voicemail service, not a household.	4500--Non-residence
Tritone with and/or without a message	This message indicates that the number may not be a working number.	5300--Possible Non-working 4300--Nonworking
The number you have reached is not in service at this time.	This message indicates that the number may not be a working number.	5300--Possible Non-working 4300--Nonworking
At the subscriber's request, this phone does not accept incoming calls.	Although this may appear to be a block, our experience with this message is that it is a hospital or group home where the phone places outgoing calls only.	5300--Possible Non-working 4300--Nonworking
Welcome to cell phone carrier. The number you have dialed is unassigned.	This message indicates that the number may not be a working number.	5300--Possible Non-working 4300--Nonworking
We're sorry; your call cannot be completed as dialed. If you feel you have reached this recording in error, please check the area code and the number and try your call again.	This message indicates that the number may not be a working number.	5300--Possible Non-working 4300--Nonworking
We're sorry. Your call cannot be completed as dialed. Please check the number and dial again or call your operator to help you.	This message indicates that the number may not be a working number.	5300--Possible Non-working 4300--Nonworking

The number you are trying to call is not reachable.	This message indicates that the number may not be a working number.	5300--Possible Non-working 4300--Nonworking
Your call has been connected to a vacant number series. Please check the number and dial again or call an operator to assist you.	This message indicates that the number may not be a working number.	5300--Possible Non-working 4300-Nonworking
The number you dialed is not a working number. Please check the number and dial again.	This message indicates that the number may not be a working number.	5300--Possible Non-working 4300--Nonworking
The number or code you have dialed is incorrect. Please check the number or code and try again.	This message indicates that the number may not be a working number.	5300--Possible Non-working 4300--Nonworking
The mobile customer you have dialed has turned the unit off or is outside its service area.	Note that this message indicates that the call may not be blocked by the respondent but by the lack of phone coverage; therefore, this message still may be coded as a technological barrier.	5400--Technological Barrier 4400--Technological Barrier
The subscriber you have dialed is not available or has traveled outside the coverage area. Please try you call again later.	Note that this message indicates that the call may not be blocked by the respondent but by the lack of phone coverage. Therefore this message still may be coded as a technological barrier.	5400--Technological Barrier 4400--Technological Barrier
The person you are calling cannot accept calls at this time. We're sorry for any inconvenience this may cause.	The potential respondent could not answer this call, even if he/she wanted to; therefore, it is a technological barrier.	5400--Technological Barrier 4400--Technological Barrier
The mobile number you dialed is unavailable. Please try your call again later.	The potential respondent could not answer this call, even if he/she wanted to therefore it is a technological barrier.	5400--Technological Barrier 4400--Technological Barrier
Welcome to (cellular telephone carrier). The wireless customer you called is not available at this time. Please try your call again later.	The potential respondent could not answer this call, even if he/she wanted to; therefore, it is a technological barrier.	5400--Technological Barrier 4400-Technological Barrier
The person you are trying to reach is not accepting calls at this time. Please try your call again later.	The potential respondent could not answer this call, even if he/she wanted to therefore it is a technological barrier.	5400--Technological Barrier 4400--Technological Barrier
The subscriber is off line. Please call again later.	The potential respondent could not answer this call, even if he/she wanted to; therefore, it is a technological barrier.	5400--Technological Barrier 4400--Technological Barrier
The person you have called is not	The potential respondent could	5400--Technological Barrier

available right now. Please try again later.	not answer this call, even if he/she wanted to therefore it is a technological barrier.	4400- Technological Barrier
The party you are calling is currently unavailable.	The potential respondent could not answer this call, even if he/she wanted to; therefore, it is a technological barrier.	5400--Technological Barrier 4400--Technological Barrier
The person you have dialed is not able to receive calls at this time.	The potential respondent could not answer this call, even if he/she wanted to; therefore, it is a technological barrier.	5400--Technological Barrier 4400- Technological Barrier
The (cellular telephone carrier) number you dialed does not subscribe to voicemail services.	This appears to be a working number without voicemail set up.	5130--No Answer 3130--No Answer
The number you have reached has not yet set up voicemail services.	This appears to be a working number without voicemail set up.	5130--No Answer
The mobile customer you have dialed has turned the unit off.	Because this is a clear message that the call has been blocked by an action of the respondent, it is a telecommunication barrier.	5150--Telecommunication Barrier 3150--Telecommunciation Barrier
Please enter your PIN to be connected.	Because this is a clear message that the call has been blocked by an action of the respondent, it is a telecommunication barrier	5150--Telecommunication Barrier 3150--Telecommunciation Barrier

An answering device is differentiated from a phone circuit message in that it offers the interviewers the possibility to leave a message. In some cases, the answering device indicates that the number dialed has reached a residence. In other cases, messages from answering devices are less specific or seem to indicate that the answering device is attached to a business. Care should be taken to ensure that coding from answering device messages is accurate. Moreover, answering devices on cellular telephone sample numbers are coded differently in some cases than are answering devices from landline telephone sample numbers. As in the past, when assigning a disposition code for an answering device before the household selection is complete will cause a prompt to be displayed. This prompt asks if the message includes “home,” “house,” “family,” “residence” or a family name. It is important to answer this question correctly.

The table below explains the coding for the four answering device codes.

Message	Comment	Code
The message indicates that the interviewer has reached a household number in the landline telephone sample.	Use this code only for the landline telephone sample. Due to potential for cellular telephone answering devices to be out-of-	2220--HH Answering device 5220--HH Answering device

<p>The message may include the word “residence” “home” “family” “household” or list the parents’ and children’s names.</p>	<p>sample, do not use this disposition code for cellular telephone sample numbers.</p>	
<p>The message does not indicate that the number is a household in the landline telephone sample. For cell phone sample numbers use this code on all answering devices where you can leave a message.</p>	<p>Assign if answering device permits the interviewer to leave a message, without indication of whether the number is connected to a household or business. Assign if answering device is reached on the cellular telephone sample.</p>	<p>3140--Answering device, unknown whether eligible 5140--Answering device, unknown whether eligible</p>
<p>The answering device indicates that the mailbox is full without indication of household status in the landline telephone sample number. Use this code for all cell phone answering devices where the mailbox is full.</p>	<p>Even though the interviewer cannot leave a message on this call, there is still potential for leaving a message on this device. Follow rules for household status on landline telephone devices.</p>	<p>2220--HH Answering device (LL only) 5220--HH Answering device (LL only) 3140-Answering device, unknown whether eligible 5140- Answering device, unknown whether eligible</p>